

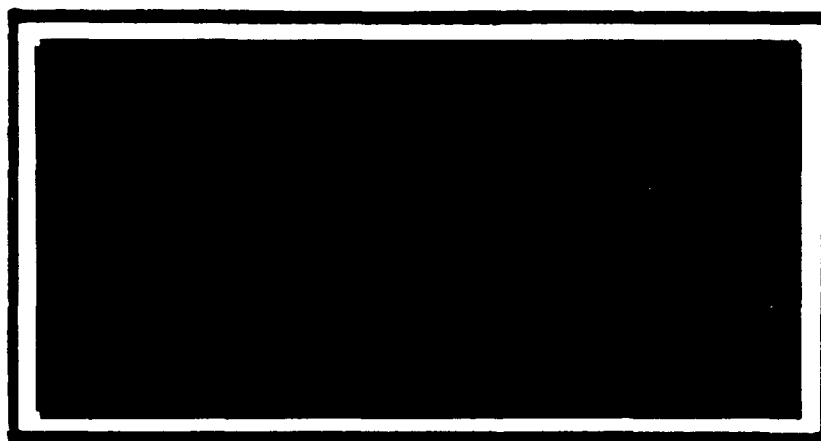
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THE IDENTIFICATION OF CONTRACTING
TERMS IN SUPPORT OF THE
BODY OF KNOWLEDGE

THESIS

William J. Hauf, Captain, USAF

AFIT/GCM/LSP/90S-4

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THE IDENTIFICATION OF CONTRACTING TERMS
IN SUPPORT OF THE BODY OF KNOWLEDGE

THESIS

Presented to the Faculty of the School of Systems and
Logistics of the Air Force Institute of Technology
Air University
in Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Contracting Management

William J. Hauf, B.S.

Captain, USAF

September 1990

Approved for public release; distribution unlimited

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Abstract

The purpose of this research was to study the need for and advancement of professionalism within the contracting work force and to establish a baseline of contracting terms that, when defined, will form a useful and accepted dictionary of contracting terminology. This thesis is part of an effort at both the Air Force Institute of Technology and the Naval Postgraduate School to identify and define those terms which will be included in the initial publication of a dictionary by the National Contract Management Association. This study had two main objectives: first, to examine how further developing the contracting body of knowledge will enhance the professionalism of the contracting discipline and work force; and second, to compile a master listing of candidate terms to be defined by associated research leading to the eventual publication of a dictionary.

The research showed that contracting is an emerging and maturing field that has a strong interdisciplinary nature in that it adopts and utilizes concepts and applications from accounting, law, economics, finance, marketing, engineering, logistics, manufacturing, and management. The use of terms from these disciplines can lead to ambiguities and contextual misinterpretations, as well as present problems in the training of personnel entering the contracting work force. Identifying and defining those terms of the highest

significance and relevance to contracting will further clarify the central theme of contracting, reinforcing the body of knowledge which is an important attribute of an acknowledged profession.

A master listing of terms, built using the comments and recommendations of selected experts in the contracting and education fields is the main product of this research effort. Additionally, several recommendations are provided to continue the work of enhancing the professionalism of the contracting work force.

THE IDENTIFICATION OF CONTRACTING TERMS IN SUPPORT OF THE BODY OF KNOWLEDGE

I. Introduction

Background

The federal contracting work force, in response to both internal concerns and external criticism, has made the recognition of the GS-1102, Contracting series as professional in nature an important issue. This quest for professionalism, not limited to the conferring of professional status upon a specific civil service series, is part of a larger concern for truly improving the quality and performance of the entire work force. A profession is not established by the mere designation of personnel, however, but must be built on the fulfillment of several requisite conditions, one of the most significant being the existence and continuing development of an accepted body of knowledge.

A leading educator wrote that "One of the crucial characteristics of a profession is the existence of a systematic body of knowledge to guide and focus requirements for technical knowledge and competence" (Lamm, 1985:30). The body of knowledge applying to federal, and in particular, Department of Defense, contracting is well documented, but is still growing and developing. The application of the body of knowledge and the operation of the general profession are

highly dependent on the process of effective communication in order to conduct business in an efficient and enforceable manner. A general agreement on the meaning of contracting terms helps develop a common language and such a common language "is important because it is woven throughout the texture of a body of knowledge" (Thornton, 1987:49-50). Further development of the contracting body of knowledge therefore involves the accurate definition of the terms used by members of the profession, and as part of a larger effort to build a useful and accepted dictionary, a proper listing of candidate terms to be defined must be assembled.

The compilation of a listing of candidate terms and their subsequent definition, besides supporting the body of knowledge that underlies the contracting profession, also serves a very practical purpose. William Thybony, who was responsible for initiating and directing the Federal Acquisition Regulation (FAR) project, wrote that "the magnitude, complexity, and diversity of government contracting involve a huge cooperative effort with the private sector, demanding a high degree of understanding, training, and education" (Thybony, 1987:8). As part of the government, the Department of Defense contracting work force is tasked with a myriad of far-ranging procurement functions, environments, and circumstances in support of military operations throughout the globe. In order to meet mission requirements in a competent and proficient manner, there is a real and pragmatic need for

widely-accepted and used definitions of terms that comprise the contracting vocabulary.

To illustrate the nature of the general problem involving contracting terminology, many references suggest that the terms acquisition, contracting, and purchasing are used interchangeably or are correlated in some hierarchy. However, as indicated in a master's thesis completed by Navy Lieutenant Commander Daniel Ryan, who made an early attempt to synthesize definitions and to whose work this thesis and companion research are related, "The idea that 'acquisition' should be the all encompassing term to include 'procurement,' 'contracting,' or 'purchasing' as subsets is not supported by published definitions" (Ryan, 1988:19). In fact, Lieutenant Commander Ryan's attempt to synthesize one concise definition for the term "acquisition" resulted in four distinct definitions required to address the broad application of this term, demonstrating that no real consensus among authoritative sources exists.

Statement of the Problem

The advancement of the practice of contracting to a legitimate and acknowledged professional status requires, in part, the development of an accepted body of knowledge including a specifically defined vocabulary. The initial problem is to identify a comprehensive list of contracting terms that need to be accurately and concisely defined as used in the Federal contracting process, especially within the

Department of Defense. This thesis establishes a baseline of 448 candidate terms to be subsequently defined and eventually published in a dictionary sponsored by the National Contract Management Association (NCMA).

Investigative questions. In order to address the total problem, two specific questions were answered. The questions are:

- 1) What terms common to contracting in the Federal government, especially to defense contracting, should be identified for later definition leading to the publication of a comprehensive dictionary?; and
- 2) How does the process of identifying and defining terms contribute to the advancement of the contracting body of knowledge and the profession in general?

Assumptions and Limitations

The researcher assumed that the reader would possess a basic familiarity with the federal contracting environment, including a fundamental understanding of the personnel system and civil service series applicable to contracting personnel. It may be useful, however, to note the origin and purpose of an organization to which a considerable amount of material is attributed later in this thesis. The Office of Federal Procurement Policy (OFPP), within the Office of Management and Budget (OMB),

was created by statute in 1974 to establish governmentwide procurement policies, to provide leadership on legislative matters concerning procurement, and to oversee the federal government's procurement regulations and regulatory systems. (Bedell, 1988:1)

A related assumption held that research which primarily concerned the personnel in the GS-1102, Contracting series also generally applied to the whole career field including uniformed personnel performing identical contracting work as the emphasis on professionalism is relevant to the entire contracting work force. Throughout this thesis, the terms contracting and contracting management are taken to have the same meaning and effect.

The limitations of this research included an initial 400 word upper limit on the list of candidate terms. Although the complete master listing of terms developed under this thesis is larger, the actual number is quite small considering the potential thousands of terms that could be evaluated because of time constraints and the subsequent follow-on work of definition and eventual publication that should be done without inordinate time delays. Also, the term selection process involved a subjective evaluation, albeit with review and comment from acknowledged procurement education experts. The effort of these experts may also have been influenced by some bias toward a particular area within the body of knowledge that could have resulted in a disproportionate representation in some areas of the body of knowledge. Lastly, time constraints prohibited any effort to begin the actual process of defining the terms once identified.

Overview

This thesis will establish a baseline for the continuing research leading to the publication of a dictionary of contracting terms by documenting the master listing of candidate terms that will be ultimately defined and collectively published. This effort supports the further development of the central theme of the contracting body of knowledge and promotes professionalism of the contracting discipline and the contracting work force. This chapter was designed to provide an introduction of the general problem relating to recognizing and improving the professional status of the contracting work force by focusing specifically on the development of the body of knowledge by compiling a listing of contracting terms and later defining these terms for use by the work force. Investigative questions were posed to be answered in subsequent chapters of this thesis. The assumptions made by the researcher and limitations placed on the scope of the work were also identified.

Chapter II provides a detailed description of the existing literature relating to the GS-1102, Contracting civil service personnel series and the efforts undertaken to promote professionalism within the contracting discipline. Also included is a discussion of professions in general and the particular characteristics, especially the existence and continuing development of a body of knowledge, attributed to a profession. Education and training as well as certification programs are discussed as are the basic goal and purpose of

identifying and defining terms used in contracting. Chapter III discusses the actual methodology employed by the researcher to review appropriate background literature, select the terms to be included in the proposed master listing of candidate terms to be defined, and provide for the review of and comment on the list by selected acquisition and education experts to validate its usefulness, relevance, and completeness. Chapter IV includes a discussion of the comments from and changes proposed by the selected experts who performed the review. Finally, Chapter V provides a conclusion and recommendations based on the results of the discussion in Chapter IV.

II. Literature Review

Contracting and Professionalism

For a number of reasons, some favorable and some otherwise, the quality and status of the federal contracting work force have been of increasing concern at the highest levels of Government. Contracting, also often known as procurement and identified within the broader acquisition field, has been the focus of various concerns as indicated in an Office of Federal Procurement Policy (OFPP) memorandum which noted that

In recent years, the professionalism of the procurement work force has been given special attention through 1) the Packard Commission recommendations, and 2) Secretary of Defense Cheney's Defense Management Review. (Loeb, 1989:2)

Among its many recommendations, the Packard Commission stated that, in order to enhance the quality of acquisition personnel, federal regulations should establish "business-related education and experience criteria for civilian contracting personnel, which will provide a basis for the professionalization of their career paths" (Quest for Excellence, 1986:66). Accordingly, the Report of the Defense Management Review stated that, in response to the Packard Commission recommendations, "DoD also will seek to increase the professionalism of its procurement workforce" (Defense Management Report, 1989:13).

To illustrate a possible reason for this attention, consider that in fiscal year 1987, the Department of Defense

awarded contracts worth more than \$156.5 billion for the hardware, goods, and services it required in the performance of its mission. Defense outlays in that year represented 28.1% of all federal outlays and consumed 6.4% of the nation's gross national product (Statistical Abstract, 1989:326, 328). It is estimated that "[federal] procuring agencies undertake more than 21 million contract actions per year--an average of 70,000 actions every working day" (Bedell, 1988:5). The personnel who solicited, negotiated, awarded, and administered those contracts were primarily a work force that was designated as an "administrative" rather than a "professional" series by the Office of Personnel Management (OPM). An obvious problem as stated in the previously-cited OFPP memo is that,

Despite heightened concerns with the general quality of the procurement work force, little has been done to increase significantly the overall educational attainments, capabilities, or professional status of those individuals assigned to positions in the GS-1102, Contracting series. (Loeb, 1989:2)

The GS-1102, Contracting series referenced in the OFPP memo includes the contract specialist, negotiator, administrator, termination specialist, cost/price analyst, and procurement analyst position titles that comprised a work force of 30,263 individuals in 1988 (Loeb, 1989:1; Report on the Acquisition Work Force, 1989:1). The importance of this series was recognized in the Packard Commission report that noted "among acquisition personnel, contracting specialists have an especially critical role" (Quest for Excellence, 1986:68).

The larger acquisition work force, estimated to include over 551,000 individuals by the Report of the Defense Management Review, faces the same pressure to improve as indicated by Jacques Gansler who, in discussing proposed areas for acquisition reform, wrote that "enhancing the quality of acquisition personnel" should be "clearly the biggest priority" (Gansler, 1989:331).

Other past criticisms of contracting personnel have also pointed out that a

lack of standards for hiring, lack of programs for advancement, and a lack of adequate training contribute to a Government procurement work force that has not established itself as a professional work force. (Krieger, 1984:96)

Compounding these problems has been the attitude of the OPM, which has traditionally "refused to allow the imposition of a general college degree requirement for entry into the GS-1102 series, or for that matter, for any other series classified as 'administrative' in nature" (Loeb, 1989:8). Even the OFPP admitted that

assuming that a prerequisite for the existence of a profession is the need for a specific kind of training prior to beginning work at the entry level of the occupation, then the GS-1102 [series] would initially appear not to meet one of the tests of a "profession." (Loeb, 1989:11)

Professions in General

As noted by Dr. Stanley N. Sherman, "Only a few occupations have achieved general recognition as a profession though many would claim to be professional" (Sherman,

1985:384). If specific training, as indicated above, is one prerequisite of a profession, are there other prerequisites, and what, then, is a profession? Preston Le Breton wrote that

a profession can be viewed in the broadest context as including all individuals who possess special skills or knowledge acquired through substantial training, education, and/or experience. (Le Breton, 1976:1)

Generally, this is taken to mean significant specialized education and experience plus some form of special certification process. Further, fundamental elements common to all professions are a body of knowledge and a systematic body of theory (Raisters, 1976:92). In her thesis, entitled "Contracting: A Systematic Body of Knowledge," Navy

Lieutenant Commander Connie Thornton stated that

A body of knowledge furnishes a firm grasp of the subject matter through the development of well-defined concepts and through the articulation of existing relationships on which there is wide-spread agreement. A basis is established for others in the field to build upon in order to advance a body of knowledge that is useful and practical. (Thornton, 1987:74)

Lieutenant Commander Thornton was able to develop a relatively generic definition of a body of knowledge using inputs from various published sources and specific comments by several academia and contracting experts. Her final definition reads as follows:

A body of knowledge is a conceptual framework that is systematized about a central theme and formulated through the process of definition, classification, and analysis with reference to the discovery of general concepts, theories, laws, and/or principles. The body of knowledge establishes a synergistic alliance among the participants (denoting a common sense of agreement) associated with the central theme which continually evolves through the process of dynamic progression. (Thornton, 1987:32)

Contracting as a Profession

Contracting must then demonstrate certain characteristics in order to fulfill the prerequisites of a recognized body of knowledge and specific training and educational requirements.

Contracting is Interdisciplinary. The issue of specialized education, training, and experience forms the basis for one of the most difficult aspects of every day reality for the contracting community. The OFPP noted that

A long-term characteristic of contracting positions has been the interdisciplinary nature of the work. Contracting personnel have been characterized as being "jacks of all trades -- masters of none."
(Loeb, 1989:3)

Additionally, others have indicated that "procurement has the disadvantages of being an interdisciplinary field of work without the accompanying challenges and advantages" (Loeb, 1989:3). The interdisciplinary nature of contracting can therefore present special problems concerning education and training.

It is true that the training of contracting personnel and the development of an acceptable body of knowledge as part of the overall effort to professionalize the contracting work force has been limited by the use of imprecise contracting terminology drawn from a variety of disciplines including management, program management, logistics, production, engineering, law, marketing, economics, finance, and accounting as indicated in Figure 1. While generally the use of a term taken from one discipline carries with it the same basic meaning and context as its use in the parent discipline,

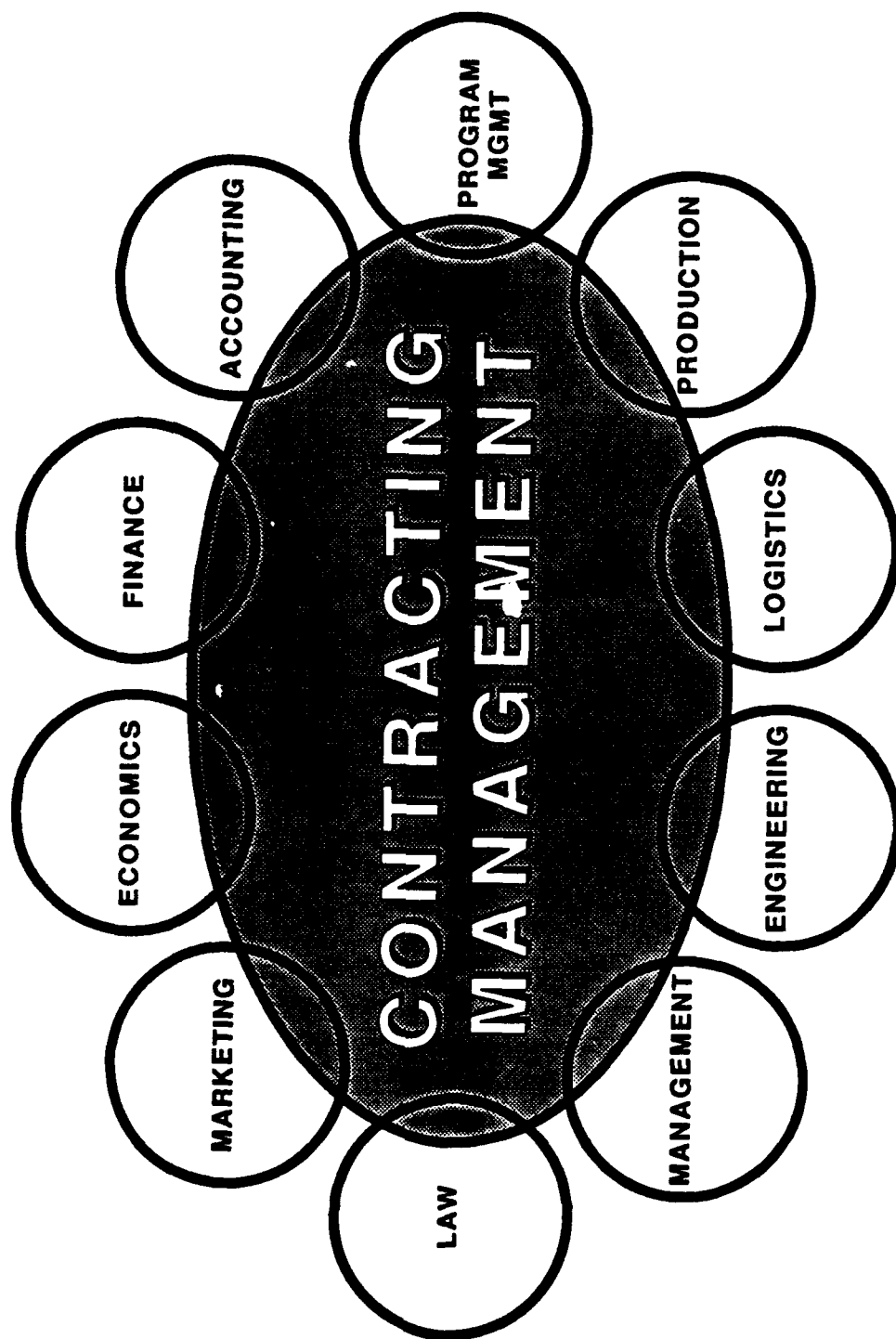


Figure 1. Interdisciplinary Nature of Contracting Management
(Dr. David V. Lamm and Dr. William C. Pursch)

there can be subtle or even significant differences in a term's meaning in a contractual sense. In many cases, there is at least a far narrower, more specific connotation associated with a contracting term than its more general, and probably, more common usage. Additionally, the lack of a precise vocabulary also has practical considerations that adversely affect routine contracting activity, especially with respect to communication and training, throughout the federal contracting environment. This environment, formed primarily by statutes and regulations is dynamic and complex, and "in reality is a mixture of procurement people and activities using various procurement rules and regulations to obtain an incredibly diverse variety of goods and services" (Alston and others, 1988:9).

While the specific NCMA-developed formal contracting body of knowledge is discussed more fully later in this chapter, there is also the recognition by OFPP that

Positions assigned to the GS-1102 series have effectively developed a de facto interdisciplinary professional body of knowledge. This body of knowledge is recognized in a number of ways, including OPM's current GS-1102 qualification standard, the professional literature of the field, as well as through professional certification programs established by procurement practitioners themselves.

(Loeb, 1989:22)

NCMA's Certification Program. To elaborate on the last point relative to certification programs in the previous OFPP quotation, the most widely known and recognized contracting professional certification program is the Certified Professional Contract Manager's program offered by the

National Contract Management Association. The NCMA is the "premier association in the contracts field" (Many Facets, undated:4). Their certification program is based on a body of knowledge developed under the guidance of Dr. Harry R. Page, now Professor Emeritus at the George Washington University, Washington, D.C. The information presented in Figure 2 (covering three pages) reflects NCMA's statement on the body of knowledge required to be a professional in contract management. The importance of the contracting body of knowledge was explained by Dr. David V. Lamm, a past NCMA Vice President for Education and Certification, who wrote,

The body of knowledge serves as the foundation of our profession and focuses our efforts in education, training, certification, research, writing, and the development of professional standards. The body of knowledge is necessary for the practitioner because it identifies the functions of the profession and how they relate to functions established in other professional areas. The body of knowledge is necessary for the theoretician because it specifies a theoretical framework which guides development of the fundamentals and principles of our profession. (Lamm, 1985:30)

This observation may be even more significant when one considers that, in addressing the need to enhance the quality of the acquisition process and personnel, Jacques Gansler stated that "In the long run, perhaps the most important thing is an improvement of the United States' overall educational system, which must equip people with the necessary technical and management skills" (Gansler, 1989:332). As can be seen, there are at present 69 separate blocks that collectively comprise the body of knowledge. Each block may represent concepts, elements, considerations, and other specific

NCMA BODY OF KNOWLEDGE

BASIC TOOLS AND FUNCTIONS

ECONOMICS	ACCOUNTING & FINANCE	MATERIALS & OPERATIONS	COMMERCIAL LAW (UCC)
Macroeconomic Concepts	Cost Accounting Basics	Elements of Production	Elements of a Contract
Microeconomic Concepts	Cost Accounting Standards	Elements of Industrial Marketing	Terms & Conditions
Industrial Organization	Elements of Business Finance	Elements of Logistics	Agency
Labor Economics	Financial Reports	Elements of Inventory Management	Warranties
	Break-Even Analysis	Surplus & Excess Property	Unconscion- ability
	Make or Buy Analysis	Materials Management	Breaches & Remedies

Figure 2. NCMA Body of Knowledge (NCMA)

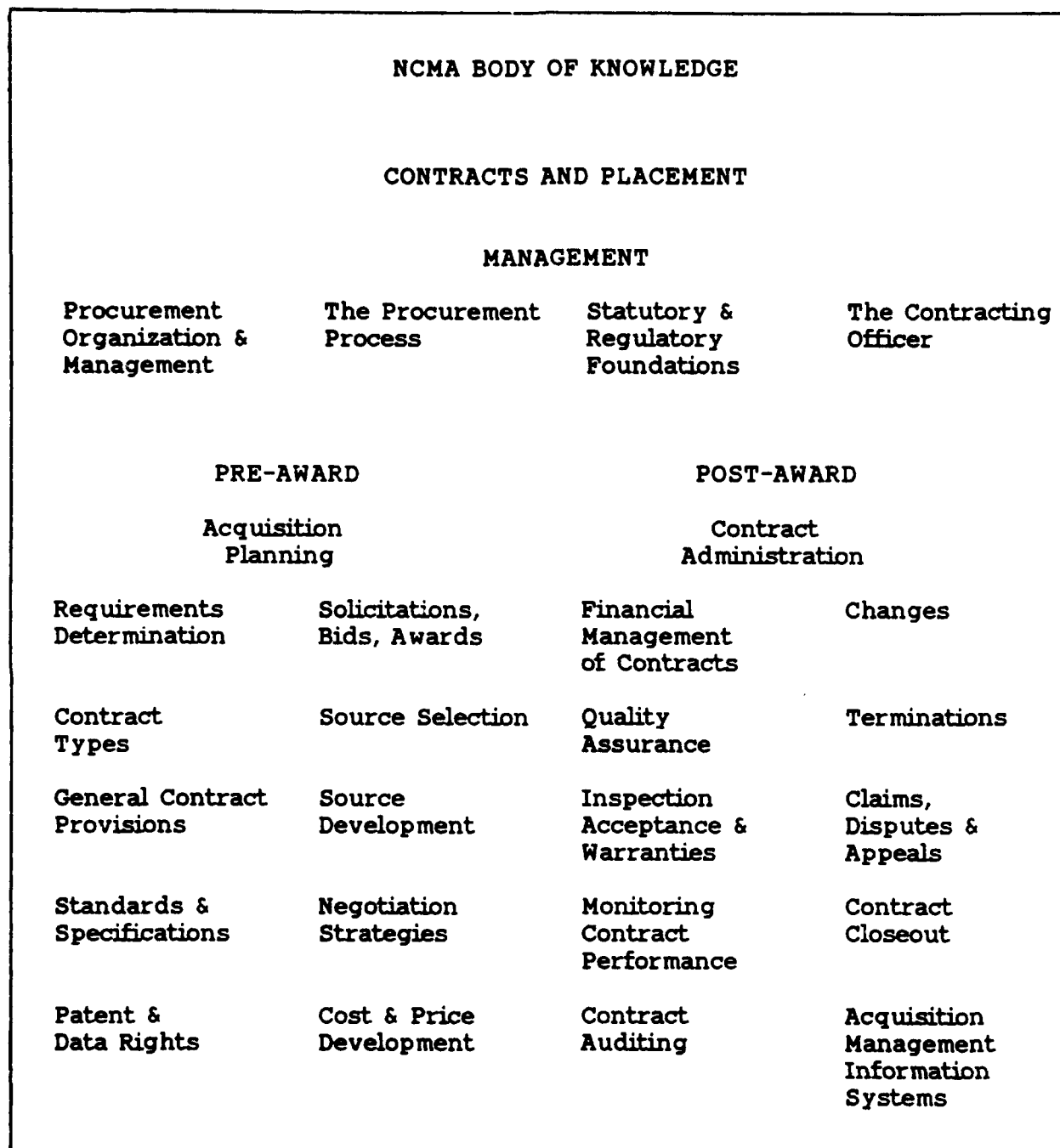


Figure 2 (continued). NCMA Body of Knowledge (NCMA)

NCMA BODY OF KNOWLEDGE

SPECIAL TOPICS AND CONSIDERATIONS

SPECIAL TOPICS

SPECIAL CONSIDERATIONS

**Budgeting for
Procurement**

**Socioeconomic
Objectives**

**Considerations in
Architect &
Engineer Contracting**

**Systems
Acquisition**

**Small & Minority
Business
Development**

**Considerations in
Construction
Contracting**

**Program/Project
Management**

**Vendor's
Management
System Audit**

**Considerations
in Service Contracting**

Productivity

**Subcontracting
& Subcontract
Management**

**Considerations in
R&D Contracting**

**Automated
Procurement**

**Commercial &
Industrial
Products**

**Considerations in
ADP Contracting**

**Ethics, Conflict
of Interest**

**Small
Purchases**

**Value
Analysis**

**International
Purchasing**

**Safety,
Reliability, &
Maintainability**

**Government
Property**

Figure 2 (continued). NCMA Body of Knowledge (NCMA)

information that relate to one or more of the disciplines from which contracting and contracting management draw. It is important to remember that the body of knowledge is a dynamic structure and that the information within the individual blocks is continually changing. The number of blocks may also change over time as well as new topic areas are developed. NCMA uses the body of knowledge as the foundation of its education and training program.

Training and Education. The topic of education seems to carry special significance in reference to improving the quality and professionalism of the work force. In proposing a separate "elite corps of acquisition professionals," Andrea Fischer wrote in an article for Defense Management Journal that "the basis for entry into the corps would be education, experience, training, and, depending on the level of entry, examination" (Fischer, 1986:10). Unfortunately, the same emphasis does not always apply in the actual work place. Concerning the current status of the training of the federal contracting work force in general, the OFPP noted

As a professional and practical matter, nearly all direct training of Contracting personnel (both in the Government and in the private sector) is accomplished either through on-the-job experience or through commercial or semi-commercial development programs. (Loeb, 1989:12)

The emphasis in the contracting community has historically focused on post-employment training and education rather than on large-scale preparatory programs at the post-secondary level. Deficiencies in specialized education that detract from efforts to promote contracting as a profession are being

addressed in a growing number of programs as indicated in the following brief, historical synopsis taken from the book

Government Procurement Management by Dr. Sherman:

Academic institutions have not traditionally addressed a great deal of effort to the training of people involved in procurement. Although a number of schools have provided courses in purchasing and materials management, only a few have developed programs which deal with the special complexities of the procurement programs of the government. In its proposal for a uniform federal procurement system, the Office of Federal Procurement Policy has stated that there is remarkable growth in the number of colleges and universities offering procurement related courses. This growth began in 1968 at the George Washington University with the introduction of its procurement and training program. Under the OFPP, the Federal Acquisition Institute has, since 1976, stimulated many new collegiate offerings and has also encouraged development of internal training initiatives within the agencies. (Sherman, 1985:49)

Specifically, the OFPP recognized that "efforts to improve the variety and number of procurement education programs have increased significantly in recent years" (Loeb, 1989:12) but that most of the college level procurement instruction tends to come as part of an institution's larger legal or business program.

The previous lack of progress in the area of quality procurement education and training was the basis of one procurement educator's observation that

these [college] courses [in procurement] are designed to make money. That's the dilemma -- these organizations are designed not to advance the body of knowledge, but rather to exploit it. (Loeb, 1989:13)

As indicated in the quotation from Dr. Sherman above, an important organization actively involved in the improvement of procurement education is the Federal Acquisition Institute

(FAI). In another article, "The Federal Acquisition Educational Program," Alma Davis described the function of the FAI in the following way:

The Federal Acquisition Institute is an effort to establish an academic body of knowledge that is comprehensive and uniform throughout academia and supported by appropriate texts, educational materials, and faculty, encourages and assists colleges and universities to establish procurement and acquisition concentrations in undergraduate, graduate, and continuing education programs. (Davis, 1987:12)

Much work in the area of education remains to be completed as, for instance, the researcher was a member of only the third class eligible to graduate with a specific Master of Science in Contracting Management degree from the Air Force Institute of Technology. With respect to the aggregate work force, it is interesting to note that of the 30,263 contract specialists (GS-1102 series) employed by the federal government in fiscal year 1988, only 51.7% held college degrees (Report on the Acquisition Work Force, 1989:21).

The Bottom Line. A critical point to be made about contracting is that the recognition and actual function as a true profession is dependent on criteria more significant and more demanding than whatever standards may be imposed by OPM. As shown in the following quote from The Defense Management Challenge by Ronald Fox and James Field, it is widely acknowledged that the contracting work force, and therefore the larger public interest, would be better served by establishing the educational and training requirements and

formal certification procedures characteristic of established professions:

In 1986, both the General Accounting Office and the Packard Commission strongly recommended that the entire GS-1102 series be reclassified as professional. They argued that the procurement profession was a complex one involving a major portion of the federal budget and that it required knowledge and skills in various areas, including cost and price analysis, contract law and procurement legislation, mathematics, forecasting, and the economic climate. (Fox and Field, 1988:254)

Indeed, notwithstanding the traditional considerations of education and training concerning professionalism, the OFPP noted that Government agencies and professional associations (including the American Bar Association's Public Contract Law Section) have commented that

it is their belief that without a professional designation for the GS-1102, Contracting series, there is simply no way of improving the quality of the work force. In their view, it is irrelevant whether the occupation meets the traditional test for a profession; more important is the need to develop professionalism within the contracting work force. (Loeb, 1989:10)

The OPM finally agreed, and in a letter dated 22 January 1990 to the OFPP, OPM Director Constance Newman wrote

I have decided that contracting positions will be designated as professional. That designation recognizes the development of the contracting occupation into one which requires a high level of competence in several disciplines. (Newman, 1990:1)

The Process Continues

The OPM designation of the GS-1102, Contracting series as professional in nature did not solve the problems previously identified. It is recognized that contracting is still an immature discipline and that a definitive body of knowledge is

needed to enhance the federal contracting process (Thornton, 1987:93-94). Part of the refinement of the body of knowledge includes the definition of contracting terminology based on the recognition that

An organizational structure as large as the Department of Defense absolutely requires that a common, agreed upon language be used to communicate concepts and meaning. (Ryan, 1988:1)

This point is further developed when applied specifically to developing a dictionary of contracting terms in that "because clear, concise communication forms the basis of every successful endeavor within the acquisition discipline, the need for such a document is apparent and urgent" (Cannaday, 1989:28).

Based on her thesis research, Lieutenant Commander Thornton wrote,

The following attributes are considered essential to the composition of a body of knowledge.

1. Central theme
2. Conceptual framework
3. Systematic classification
4. Operational axioms
5. Dynamic progression (Thornton, 1987:33)

She acknowledged that "in total, it is apparent that the contracting discipline possesses rudiments of the necessary attributes required to establish a body of knowledge" (Thornton, 1987:71). However, she indicated that the NCMA-developed body of knowledge, despite being "the most organized and comprehensive approach to the methodology of the contracting discipline," (Thornton, 1987:83) falls short in addressing the attributes of operating axioms and dynamic

progression. The contracting body of knowledge as developed and fostered by the NCMA, just as any maturing body of knowledge, has need for further expansion and evolution. The definition of contracting terms directly supports the central theme attribute of any body of knowledge. A general agreement among experts and practitioners of the contracting discipline is important in clarifying the central theme of contracting management as "collectively established definitions and concepts are objectives of this particular attribute" (Thornton, 1987:33-34).

Various attempts have been made to provide definitions of contracting terminology, but there is no single, practical source for the definition of contracting terms. In a master's thesis that did earlier work in defining specific contracting terms, Air Force Captain John Cannaday wrote that his research showed that "Currently available literature regarding the meanings of words and phrases unique to the acquisition field reveals the general lack of a comprehensive lexicon of procurement terminology" (Cannaday, 1989:28). The most pervasive and controlling influence in government contracting is the Federal Acquisition Regulation (FAR) which has been described as "a single, uniform, simplified regulation governing the acquisition of supplies and services with appropriated funds for all federal executive agencies, both civil and military" (Thybony, 1987:33). The FAR itself contains, in Subpart 2, titled Definitions of Words and Terms, definitions of only 21 specific terms (FAR, 1984:2-1);

however, as shown in Appendix D: Listing of FAR Definitions in Alphabetic Order of Lieutenant Commander Ryan's thesis, a total of 572 definitions are scattered throughout the various subparts of the FAR (Ryan, 1988:126). Under the sponsorship of the NCMA, graduate students at the Naval Postgraduate School and the Air Force Institute of Technology have been and will be defining contracting terms, synthesizing the best possible definition from among those published in available sources, under the premise that

the best way to assure that the definitions truly represent word and term meaning as used by a majority of the contracting community is through the use of some kind of survey to achieve a consensus. Only through consensus can a baseline be established upon which both established contracting professionals along with newcomers just beginning practice in the contracting discipline can rely. (Ryan, 1988:6)

The process of obtaining synthesized, consensus-based definitions, often resulting in a multiple definition product as shown by the example in the introduction to this thesis, is supported by the understanding that

The ambiguities of words, especially of higher-order abstractions, can best be brought under control by the technique of multiple definition. It consists of the assembling of the chief contexts in which such a word can occur, and the extracting of its sources from each of these contexts. (Ullmann, 1951:100)

As indicated previously, contracting is interdisciplinary in nature, and, therefore, the specific context in which a term is used in contracting becomes extremely important. It is true that "the situational context alone can eliminate the vagueness in the linguistic expression as such" (Werkmeister, 1968:30) in many cases, and it is accordingly appropriate to

provide definitions of terms in their contracting context. This work, ultimately leading to the publication of a dictionary, is just a small part of the process of professionalizing the contracting work force that will require the efforts of many of its members, reinforcing a point made by Cyril O. Houle who stated,

The first and most dominant characteristic [associated with the professionalizing process] is that as many members as possible of a professionalizing vocation should be concerned with clarifying its defining function or functions. It is difficult but necessary to seek constantly to understand the structural tenants of a practitioner's work--those which give it focus and form. (Houle, 1980:40)

The collective effort to identify and provide definitions of contracting terms and build a common frame of reference and means of communication and understanding for members of the contracting work force reflects an additional characteristic described by Houle who went on further to add,

[Another] characteristic of professionalization is that the practitioners of a vocation should seek mastery of at least the rudiments of the information and theory--originally derived for descriptive rather than practical ends--that comprise the knowledge base of the profession. (Houle, 1980:40)

The vocabulary of contracting is a rudimentary element of the acquisition business and profession. Anyone seeking to first enter and then excel at the profession must understand the origins and context of the terms that make up the contracting vocabulary. The identification and definition of contracting terms, therefore, is of highest value in further developing the knowledge base of the profession.

III. Methodology

Literature Review

The general method employed to solve the stated research problem was qualitative and began with a review of the available literature pertinent to the professionalization of a generic career field, emphasizing the significance of the development of a body of knowledge. Sources for this material were drawn from publications in the social science research and education fields as well as identified theses that have dealt with the systematic body of contracting knowledge. Additionally, this research effort concentrated on a significant volume of material generated by the Office of Federal Procurement Policy as part of a long-term effort to seek a change in the classification of the GS-1102, Contracting civil service series by the Office of Personnel Management from an administrative series to a professional series. OPM was also considered a source for information relating to the composition of the existing GS-1102, Contracting series work force, including such specifics as educational background and experience. An additional source of information related to work to advance the professionalism of the contracting work force, including a professional certification program, was the recognized leading association in the contract management field, the National Contract Management Association and its journal.

Also, the researcher reviewed existing public statutes, regulations, instructions, policies, dictionaries and lexicons of contracting terminology, including the Federal Acquisition Regulation itself and publications by the General Accounting Office, Defense Systems Management College, Air Force Institute of Technology, Naval Postgraduate School, NCMA, and related associations such as the National Institute of Purchasing Managers, to recognize and acknowledge the total population from which terms were specifically selected.

Selection of Terms

Using the body of knowledge as outlined by Dr. Harry Page, Professor Emeritus at the George Washington University, as a reference, the researcher proposed to select approximately 350-400 candidate terms based on their evaluated frequency of use, potential for ambiguity or misunderstanding, relevance and importance to the contracting process, presence in contracting literature, and overall practical value to the body of knowledge. Initially, a total of 352 terms, the complete listing of which is found in Appendix A, were selected in consideration of their relation to and support of the contracting body of knowledge adopted by the NCMA. The NCMA body of knowledge, and thus the list of terms, may be generalized into the following areas:

1. Business management, particularly materials and operations management.
2. The economics of materials and operations management.
3. Cost and price analysis and negotiation techniques.
4. Legal and regulatory aspects of procurement and contracting.
5. Managerial planning, decision making, communication, and control.
6. Procurement and contracting policy and procedures.
7. Management information systems, and information and data analysis. (NCMA Manual, 1987:III-1)

Using the sources identified above and in the previous literature review chapter, consideration was given to a broad spectrum of sources so as to include terms that do not apply solely to limited segments of the body of knowledge or in a biased manner reflect the interests of any particular agency. An index of dictionary-related sources reviewed by the researcher to build the proposed initial list of terms is found at Appendix B. That index does not repeat those sources identified in the bibliography of this thesis.

Review and Comment

The selected terms were provided under cover letter to a group of 18 distinguished academics, all earned doctorates, selected after consultation with the NCMA Functional Director for Research and Grants for their expertise and ability to contribute meaningfully to this process. The letter and listing of selected experts are provided at Appendices C and D. These recognized authorities, leading figures in procurement education, were solicited for their oral and written comments, additions, deletions, and suggestions. The experts have backgrounds and training that permitted them to

comment across the entire collection of terms. The experts were given an opportunity to make whatever changes to the listing considered appropriate in an open-ended request. Their comments are discussed in Chapter IV and their recommended changes were compiled into the list found in Appendix E. The proposed initial list and the recommended changes were then consolidated into a master listing, found in Appendix F, which is to serve as the baseline for future work in the process of defining the terms. Efforts to define the terms themselves are beyond the scope of this thesis. The baseline listing of terms will, however, be used by the Air Force Institute of Technology, Naval Postgraduate School, and NCMA to direct further work leading to the publication of a dictionary of contracting terms for use throughout the federal and commercial contracting community.

IV. Analysis and Discussion

Introduction

A glance at the glossary of, for example, an accounting, law, finance, or engineering text book reveals that the population from which the interdisciplinary vocabulary of contracting is drawn is both enormous and diverse. It is therefore impractical to try to list the thousands of terms which may be absorbed and used by the contracting work force. Rather, in establishing a baseline from which to define terms for publication in a dictionary, it is more important to limit the initial identification of terms to those which have a high frequency of use, potential for misunderstanding or ambiguity, and relevance to the field of contracting.

As the ultimate intended product of the process of identifying and defining terms is the timely publication of a dictionary, inordinate delays in the process and unnecessary extensions of the work are not desirable. The challenge, therefore, is to compile a list of candidate terms that is both large enough to be meaningful and useful to the contracting community, but small enough to be practical and realistic.

Appendix A is an alphabetical listing of terms that were originally selected by the researcher as being representative of an adequate baseline for the intended dictionary of contracting terminology. As indicated in the previous chapters of this thesis, a group of 18 recognized authorities

in the fields of contracting and education were asked to review and comment on the proposed listing of terms. Responses were received from ten of these selected authorities and a description and summation of their recommended changes are provided in the following section.

Expert Recommended Changes

While the majority of the responses received from the selected experts primarily addressed additional terms recommended for inclusion on the master list, some general comments received from the experts warrant mention in this discussion.

One authority indicated that the master list should be expanded to include all terms identified in the General Accounting Office Thesaurus, a document which includes references for over 3,200 terms. Conversely, another expert found that the range of terms in the proposed listing was already too wide in that it included terms pertinent to purchasing throughout the economy and to the broad field of logistics and related fields.

Other comments considered the use of the list of terms as the baseline for a dictionary and recommended that related terms or terms that are close in meaning be identified by an appropriate parenthetical reference when a single definition may be adequate. For instance, the term "overrun" would be followed by "(see cost overrun)" to direct a reader's attention to the definition in its most appropriate form and

location within the dictionary. Also, comments addressed the need for the intended dictionary to 1) have a clearly stated set of standards for including terms, 2) provide the more general as well as specific contracting management definition of those terms which also have broad usage, and 3) invite additions and comments from readers and establish provisions for periodic updates.

Additionally, recommendations included the addition of more acronyms following terms commonly associated with such references and the inclusion of a short listing of federal agencies most responsible for contracting matters.

With respect to the actual listing of terms, 120 changes were recommended. The recommended changes were mostly additions or minor revisions and the few recommended deletions (three total) were accompanied by proposed replacements rather than the elimination of the concept embodied by the term entirely. No one single expert recommended changes that displayed a bias that would have disproportionately weighted the complete list of terms in favor of a particular discipline.

A list containing a summation of the significant changes recommended by the authorities selected to review and comment upon the proposed master listing of terms is found at Appendix E.

Summary

The comments received from the selected experts essentially concerned the addition of particular terms to the master list. Other comments addressed the expanded use of acronyms and the inclusion of a short list of agencies involved in federal contracting activities. Additional comments concerned the use of the terms in the intended dictionary itself. The expert comments and recommendations are further discussed in the conclusions and recommendations sections of Chapter V.

V. Conclusions and Recommendations

Conclusions

The complete master listing of terms which is to serve as the baseline for further research in defining the identified terms and publication of a dictionary of contracting terminology was increased to a total of 448 terms based on recommendations made by the selected contracting and education experts.

This expansion resulted in a list which still possesses the desired characteristics of being large enough to be meaningful and useful to the contracting work force yet small enough to be practical and realistic in terms of completing definition and publication efforts. The researcher rejected one expert's recommendation to expand the size of the listing to include all terms identified in the General Accounting Office Thesaurus as the master listing would then have been far too large given that the terms require subsequent definition and publication in a dictionary. In response to the comment that the list was already too broad, consideration must be given to the interdisciplinary nature of contracting and the recognition that some terms, while not unique to contracting management, should be included due to their value and relevance to contracting. The intended dictionary will provide definitions of those terms with which a contract specialist should be familiar and the complete master list

must therefore reflect the broad interdisciplinary nature of contracting.

The complete master list by its nature reflects the standards of importance, relevance, frequency of use, presence in contracting literature, and potential for ambiguity or misunderstanding for the included terms. The review and modification of the list by 18 selected authorities in the fields of contracting and education validated the process of selecting terms, which was admittedly subjective in design. However, a purely objective standard (such as frequency of appearance in the Federal Acquisition Regulation) is impractical to establish the intended dictionary's baseline. The listing of terms resulting from the process of initial selection, review by experts, and revision as indicated based on expert recommendations is not meant to be static or fixed. An ongoing effort will be required to keep the listing current and reflect the developing nature of the field of contracting management. The list does serve, however, as a baseline from which the continuing work of defining the terms and publishing a dictionary of the definitions can proceed. The current list of 448 terms, while reflective of the broad, interdisciplinary nature of contracting, remains small enough that all terms identified can be included in the first publication of the intended dictionary.

The complete master list, found in Appendix F, has been revised to include 75 acronyms and 11 parenthetical references to related terms (for which another definition would not be

necessary) to aid in its value to the dictionary. It also contains as another reference an abbreviated listing of agencies involved in the federal procurement process. The expert comments regarding contracting-unique and general definitions and updating procedures are valid considerations for the intended dictionary and are contained in the recommendations which follow.

Recommendations

The research performed under this thesis effort supports the following recommendations:

- 1) That the complete master listing of terms found at Appendix F be adopted as the baseline for a dictionary of contracting terminology.
- 2) That definitions for each of the terms identified in the complete master listing be developed and published as a dictionary.
- 3) That the definitions in such a dictionary be developed utilizing the synthesis/consensus method used in past and concurrent associated research efforts at the Air Force Institute of Technology and the Naval Postgraduate School.
- 4) That the definitions for the identified terms include both the contracting management peculiar and the broader, more general application, if appropriate; and, that the dictionary invite commentary from its readers to be used for periodic updates.

5) That the complete listing of terms be reviewed periodically, aside from review as part of the larger dictionary, for changes resulting from the dynamic nature of contracting management and the evolving professionalism of the contracting discipline.

Summary

The ongoing concern over the professionalism of the contracting work force has not been satisfied by the recent federal Office of Personnel Management designation of the GS-1102, Contracting series as professional rather than administrative in nature. A critical element underlying any profession is a formal body of knowledge and the contracting body of knowledge is made even more important and complicated by its interdisciplinary character. A step in the further development of the contracting body of knowledge is the identification and ultimate definition of commonly used contracting terms which will also be of value to the training of new personnel entering the contracting field. This thesis addressed the initial effort to identify candidate contracting terms and resulted in a master listing of contracting terms which establishes a baseline for the further definition of those terms and their publication in a dictionary. This attempt is part of a continuing effort to better clarify and develop the contracting body of knowledge and advance the professionalism of the contracting work force.

APPENDIX A:
PROPOSED INITIAL LISTING OF SELECTED TERMS

A

abstract of bids
acceptable quality level (AQL)
acceptance
accounting
acquisition
acquisition plan
acquisition strategy
acquisition streamlining
adequate competition
administrative change
administrative contracting officer (ACO)
advance acquisition
advertised procurement
affirmative action
agent
agreement
allocable (cost)
allocated baseline
allotment
allowable (cost)
amendment
amortization
Anti-deficiency Act
anti-trust law
appeal
apportionment
appropriated funds
appropriation
arbitrary
Armed Service Board of Contract Appeals
assignment
audit
authorized deviation
award

B

bailment
baseline
basic agreement
basic ordering agreement (BOA)
best and final offer (BAFO)
bid
bid and proposal costs
bid bond
bid opening
bid rejection
bid withdrawal
bidders conference

bidders mailing list
bill of lading
bill of materials (BOM)
blanket purchase agreement (BPA)
boiler plate
brand name or equal
breach of contract
burden
Buy American Act
buy in
buyer

C

cardinal change
ceiling price
certificate of competency
certification of cost or pricing data
change
change order
claim
collusive bidding
Commerce Business Daily
commercial item
commercial item descriptions
commitment
competition
Competition in Contracting Act
competitive range
competitive negotiation
competitive sealed bidding
concept exploration
configuration
configuration control/management
conflict of interest
consideration
constructive change
contract
contract administration
contract, cost reimbursement
contract, cost reimbursement, cost
contract, cost reimbursement, cost-plus-award-fee
contract, cost reimbursement, cost-plus-incentive-fee
contract, cost reimbursement, cost-plus-fixed-fee
contract, cost reimbursement, cost sharing
contract, fixed price
contract, fixed price, firm
contract, fixed price, economic price adjustment
contract, fixed price, level of effort
contract, fixed price, price redetermination
contract, fixed price, incentive, firm target
contract, fixed price, incentive, successive targets
contract, labor hour
contract, letter

contract, requirements (IDIQ)
contract, time and materials
contract data requirements list (CDRL)
contract modification
contracting
contracting officer
contracting out (OMB circular A-76)
contractor
contractor furnished equipment
cost
cost accounting
Cost Accounting Standards
cost analysis
cost or pricing data
cost performance report (CPR)
cost reimbursement
cost risk
cost/schedule cost systems criteria (C/SCSC)
could cost
cure notice

D

data
debarment
default
defective cost or pricing data
defective pricing
definitization
delegation
delinquency
delivery order
demonstration and validation
depreciation
design specification
determination and findings
determination of responsibility
development baseline
deviations
direct cost
direct labor
direct material
disclosure statement
discount
dispute
documentation

E

economic order quantity (EOQ)
"effective" competition
engineering change proposal
equitable adjustment
escalation
established catalog price

established market price
ethics
excess procurement costs
excusable delay
executed contract
expense

F

fair and reasonable
Federal Acquisition Regulation
fee
field pricing support
FIFO cost method
first article
fiscal year
flow-down clauses
foreign military assistance (sales)
forward pricing (arrangement)
"full and open" competition
full scale development
functional baseline
functional specification

G

general and administrative (G&A) expense
general provisions
general scope
government furnished equipment (GFE)
government furnished material (GFM)
government furnished property (GFP)
government title
guarantee

H

head of contracting activity (HCA)

I

implied contract
imprest fund
in scope
incentive arrangement
independent research and development
indirect cost
industrial modernization incentives program (IMIP)
inspection
integration
interim pricing
inventory

J

justification and approval (J&A)

L

labor surplus area
leader/follower concept
learning curve
letter contract
license agreement
life cycle cost
limited rights
liquidated damages

M

major systems
make-or-buy program
manufacturing resource planning (MRP II)
market analysis
market survey
material
material requirements planning (MRP)
materiality
material management and accounting systems (MMAS)
materials management
memorandum of agreement
multi-year contracting
multiple award

N

negligence
negotiation
nonappropriated funds
nondevelopmental item (NDI)
nonrecurring costs
notice of award
not-to-exceed price
novation agreement

O

obligation
offer
offeror
Office of Federal Procurement Policy (OFPP)
offset
option
other than full and open competition
overhead
overrun

P

patent
payment bond
performance bond
pre-award survey
pre-bid conference
pre-solicitation conference
price

price analysis
price competition
price negotiation memorandum (PNM)
pricing
prime contractor
privity of contract
procurement
procurement package
procuring contacting officer (PCO)
producibility
production
production baseline
profit
progress payments
prompt payment discount
proposal
proprietary data
proprietary right
protest
provisioning
prudent businessman concept
purchase order
purchase request
purchasing

Q

qualified bidders list
qualified products (parts) list
quality
quality assurance
quality control
quote

R

random sampling
rates and factors
reasonable cost
recurring cost
remedy
request for proposal
request for quotation
requirement(s)
residual value
responsibility
responsiveness
restricted competition
reverse engineering
rights in technical data
risk
risk assessment
royalty
Rule 4 file

S

salvage value
scope of work
scrap
sealed bidding
second source
section 8(a) contract
set-aside
should cost
show cause
single source
small and disadvantaged business concern
small business concern
sole source
solicitation
source
source selection
source selection authority
specification
standard
statement of work
subcontract
subcontractor
supplemental agreement
surety
synopsis
system specification baseline

T

target price
technical analysis
technical evaluation
technical leveling
technical transfusion
termination contracting officer (TCO)
termination for convenience
termination for default
termination liability
terms and conditions
testing
title
transfers (ownership)
Truth in Negotiations Act
two-step procurement (sealed bidding)

U

unallowable cost
undefinitized contractual action (UCA)
unlimited rights
unsolicited proposal

V

validation
value
value analysis
value engineering
value engineering change proposal (VECP)
vendor
verification
voucher

W

waivers
warranty
weapon system
weighted guidelines profit analysis
will cost
work breakdown structure (WBS)
work measurement standards

APPENDIX B:
NONBIBLIOGRAPHICAL SOURCES

Compendium of Authenticated Systems and Logistics Terms, Definitions and Acronyms. Air Force Institute of Technology, Wright Patterson AFB OH, 1981.

Desktop Guide to Basic Contracting Terms. National Contract Management Association, Vienna VA, undated.

Dictionary of Cost Estimating Terms and Phrases (Second Edition). National Estimating Society, Fall 1986.

The Dictionary of Purchasing Terms (Fourth Edition). The National Institute of Government Purchasing, Inc., Falls Church VA, 1986.

General Accounting Office Theasaurus, Second Edition. United States General Accounting Office, Office of Information and Resources Management, 1985.

Glossary of Acquisition Management Acronyms and Terms. Department of Defense Systems Management College, 1985.

APPENDIX C:
LETTER TO SELECTED EXPERTS

6 June 1990

Dear

Students at the Air Force Institute of Technology and the Naval Postgraduate School have been and are currently engaged in the process of researching and synthesizing definitions of selected contracting terms. The end product of these efforts will be a dictionary which, it is hoped, will finally become a practical, single authoritative source for use in our profession when it is published by the National Contract Management Association.

A critical part of this process is the compilation of a master listing of terms to be subsequently defined by future research efforts. This thesis, coupled with previous research, will provide a baseline and framework to construct the initial dictionary of contracting terms. Accordingly, the enclosed proposed master listing of candidate terms has been developed by Captain Bill Hauf at AFIT. Request your review of the listing and your comments and suggestions for any additions, deletions, or other changes to the list.

Your knowledge and experience in the fields of contracting management and academics will assist us in the difficult task of compiling a list that is both large enough to be meaningful and useful, but short enough to be practical and realistic, thus expediting the publication of the proposed dictionary. The list is intended to be representative and sufficiently broad in consideration of the many disciplines from which contracting borrows and further refines concepts and applications.

Please comment directly on the provided listing and return your remarks in the envelope provided by 26 June 1990, if possible. Should you have any questions, please feel free to contact Capt Hauf at (513) 878-9568. Thank you for your assistance in our continuing efforts at AFIT and the NPS to further the advancement of the contracting management profession.

WILLIAM C. PURSCH, Ph.D.
Professor of Contracting Management

Enclosure

**APPENDIX D:
SELECTED CONTRACTING MANAGEMENT AND
EDUCATION EXPERTS**

Dr. Paul F. Arvis
Florida Institute of Technology
U.S. Army Logistics Management Center

Dr. Alan W. Beck
Associate Dean
Defense Systems Management College

Dr. Jay C. Billings
Vice President
Defense Systems Management Corporation

Dr. David N. Burt
School of Business Administration
University of San Diego

Dr. Ellen J. Dumond
Department of Management
Miami University

Dr. Margaret A. Emmelhainz
Department of Marketing
University of Dayton

Dr. Douglas N. Goetz
Associate Professor of Contracting Management
Air Force Institute of Technology

Dr. Joseph L. Hood
Federal Acquisition Institute

Dr. David V. Lamm
Associate Professor
Department of Administrative Sciences
Naval Postgraduate School

Dr. John Magnoti, Jr.
Kogod School of Business Administration
The American University

Dr. Martin D. Martin
School of Business
Western Carolina University

Dr. John J. Mulhurn
Associate Professor, Committee Chair on Management
Pennsylvania State University

Dr. Ralph C. Nash
Professor of Law
The George Washington University

Dr. Harry R. Page
Professor Emeritus
The George Washington University

Dr. Stanley N. Sherman
Professor of Business Administration
The George Washington University

Dr. Larry L. Smith
Former Dean, School of Systems and Logistics
Air Force Institute of Technology

Dr. Rita L. Wells
Associate Professor of Contracting Management
Air Force Institute of Technology

Dr. Leonard M. Winter
Florida Institute of Technology

APPENDIX E:
EXPERT RECOMMENDED CHANGES TO
THE MASTER LISTING OF TERMS

A

actual (costs)
advance agreement
[advertised procurement]
agency peculiar equipment
architect-engineering (A&E) contract
[Armed Services] Board of Contract Appeals
auctioning
award fee (see fee)

B

baseline cost estimating (BCE)
bid protest (see protest)
bidder
bilateral (agreement)
Board of Contract Appeals
breakeven analysis
breakout

C

capricious
co-development
commercial off-the-shelf
competitive proposals
consultant
contingency
contract administrative services (CAS)
contract advice and assistance services
contract clause
contract, fixed price, award fee
contract, indefinite quantity
contract, level of effort
[contract, requirements (IDIQ)]
contract management
contractor acquired property
contractor inventory
co-production
cost element
cost estimating relationship (CER)
cost growth
cost objective
cost overrun
cost underrun

D

data item description (DID)
debriefing
de facto debarment
design to cost
dual source

E

economic price adjustment (EPA) clause
economic production rate (EPR)
economic purchase quantity (see economic order quantity)
educational service agreement (ESA)
engineering estimate
estimate at completion (EAC)
estimate to complete (ETC)
evaluation criteria
expenditure
expense pool
experience curve (see learning curve)

F

facilities
fair and equitable
final cost objective (see cost objective)
fixed costs
[forward pricing (agreement)]
forward pricing rate agreement (FPRA)
full scale engineering development

G

government furnished information (GFI)
"grass roots" estimate

H

I

incurred cost
independent cost analysis
industrial plant equipment
initial provisioning (see provisioning)

J

just-in-time (JIT) inventory method

K

L

last-in-first-out (LIFO) inventory method
latent defect
letter of agreement
letter of intent
limited authority
logistics

M

materiel
materiel management
memorandum of understanding (MOU)
modification (see contract modification)

N

O

off-the-shelf (see commercial off-the-shelf)
other plant equipment
overrun (see cost overrun)

P

patent defect
pilot production
plant clearance officer
postaward
pre-proposal conference
procurement administrative leadtime (PALT)
product assurance
profit analysis
profitability
progress payments inventory
property administrator
prospective pricing
publicized procurement
purchasing system

Q

quality assurance program

R

real property
request for equitable adjustment (REA)
retroactive pricing
risk analysis
risk management

S

single source
source selection advisory council
source selection advisory board
special test equipment
special tooling
standard commercial item (see commercial item)

T

target fee
target profit
teaming agreement
term
total quality management (TQM)

U
underrun (see cost underrun)
unilateral (modification)
unpriced

V
variable cost

W
waste
withholding (payment)

X

Y
yield

Z
z-factor

Note: the use of brackets, [], indicates deletion of a term
or part of a term

APPENDIX F:
COMPLETE MASTER LISTING OF TERMS

A

abstract of bids
acceptable quality level (AQL)
acceptance
accounting
acquisition
acquisition plan
acquisition strategy
acquisition streamlining
actual (costs)
adequate competition
administrative change
administrative contracting officer (ACO)
advance acquisition
advance agreement
advertised procurement
affirmative action
agency peculiar equipment
agent
agreement
allocable (cost)
allocated baseline
allotment
allowable (cost)
amendment
amortization
Anti-deficiency Act
anti-trust law
appeal
apportionment
appropriated funds
appropriation
arbitrary
architect-engineering (A&E) contract
assignment
auctioning
audit
authorized deviation
award
award fee (see fee)

B

bailment
baseline
baseline cost estimating (BCE)
basic agreement
basic ordering agreement (BOA)
best and final offer (BAFO)
bid

bid and proposal (B&P) costs
bid bond
bid opening
bid protest (see protest)
bid rejection
bid withdrawal
bidder
bidders conference
bidders mailing list
bilateral (agreement)
bill of lading
bill of materials (BOM)
blanket purchase agreement (BPA)
boiler plate
brand name or equal
breach of contract
breakeven analysis
breakout
burden
Buy American Act
buy-in
buyer

C

capricious
cardinal change
ceiling price
certificate of competency (COC)
certification of cost or pricing data
change
change order
claim
co-development
collusive bidding
Commerce Business Daily (CBD)
commercial item
commercial item descriptions
commercial off-the-shelf
commitment
competition
Competition in Contracting Act (CICA)
competitive negotiation
competitive proposals
competitive range
competitive sealed bidding
concept exploration
configuration
configuration control/management
conflict of interest
consideration
constructive change
consultant
contingency

contract
contract administration
contract administrative services
contract advice and assistance services
contract, cost reimbursement
contract, cost reimbursement, cost
contract, cost reimbursement, cost sharing
contract, cost reimbursement, cost-plus-award-fee (CPAF)
contract, cost reimbursement, cost-plus-fixed-fee (CPFF)
contract, cost reimbursement, cost-plus-incentive-fee (CPIF)
contract, fixed price (FP)
contract, fixed price, award fee
contract, fixed price, economic price adjustment
contract, fixed price, firm (FFP)
contract, fixed price, incentive, firm target (FPIF)
contract, fixed price, incentive, successive targets
contract, fixed price, level of effort
contract, fixed price, price redetermination
contract, indefinite quantity
contract, labor hour
contract, letter
contract, time and materials
contract clause
contract data requirements list (CDRL)
contract management
contract modification
contracting
contracting officer (CO)
contracting out (OMB circular A-76)
contractor
contractor acquired property
contractor furnished equipment (CFE)
contractor inventory
cost
cost accounting
Cost Accounting Standards (CAS)
cost analysis
cost element
cost estimating relationship (CER)
cost growth
cost objective
cost or pricing data
cost overrun
cost performance report (CPR)
cost reimbursement
cost risk
cost/schedule cost systems criteria (C/SCSC)
cost underrun
could cost
cure notice

D

data
data item description (DID)
de facto debarment
debarment
debriefing
default
defective cost or pricing data
defective pricing
definitization
delegation
delinquency
delivery order
demonstration and validation
depreciation
design specification
design to cost
determination and findings
determination of responsibility
development baseline
deviations
direct cost
direct labor
direct material
disclosure statement
discount
dispute
documentation
dual source

E

economic order quantity (EOQ)
economic price adjustment (EPA) clause
economic production rate (EPR)
economic purchase quantity (see economic order quantity)
educational service agreement (ESA)
"effective" competition
engineering change proposal (ECP)
engineering estimate
equitable adjustment
escalation
established catalog price
established market price
estimate at completion (EAC)
estimate to complete (ETC)
ethics
evaluation criteria
excess reprocurement costs
excusable delay
executed contract
expenditure

expense
expense pool
experience curve (see learning curve)

F

facilities
fair and equitable
fair and reasonable
Federal Acquisition Regulation (FAR)
fee
field pricing support
final cost objective (see cost objective)
first-in-first-out (FIFO) inventory method
first article
fiscal year
fixed costs
flow-down clauses
foreign military assistance (sales) (FMS)
forward pricing rate arrangement (FPRA)
"full and open" competition
full scale development
full scale engineering development
functional baseline
functional specification

G

general and administrative (G&A) expense
general provisions
general scope
government furnished equipment (GFE)
government furnished information (GFI)
government furnished material (GFM)
government furnished property (GFP)
government title
"grass roots" estimate
guarantee

H

head of contracting activity (HCA)

I

implied contract
imprest fund
incurred costs
in scope
incentive arrangement
independent cost analysis
independent research and development (IR&D)
indirect cost
industrial modernization incentives program (IMIP)
industrial plant equipment
initial provisioning (see provisioning)
inspection

integration
interim pricing
inventory

J

just-in-time (JIT) inventory method
justification and approval (J&A)

K

L

labor surplus area
last-in-first-out (LIFO) inventory method
latent defect
leader/follower concept
learning curve
letter contract
letter of agreement
letter of intent
license agreement
life cycle cost
limited authority
limited rights
liquidated damages
logistics

M

major systems
make-or-buy program
manufacturing resource planning (MRP II)
market analysis
market survey
material
material management and accounting systems (MMAS)
material requirements planning (MRP)
materiality
materials management
materiel
materiel management
memorandum of agreement
memorandum of understanding (MOU)
modification (see contract modification)
multi-year contracting
multiple award

N

negligence
negotiation
nonappropriated funds
nondevelopmental item (NDI)
nonrecurring costs

not-to-exceed (NTE) price
notice of award
novation agreement

O

obligation
offer
offeror
Office of Federal Procurement Policy (OFPP)
offset
off-the-shelf (see commercial off-the-shelf)
option
other plant equipment
other than full and open competition
overhead
overrun (see cost overrun)

P

patent
patent defect
payment bond
performance bond
pilot production
plant clearance officer
post-award
pre-award
pre-award survey
pre-bid conference
pre-proposal conference
pre-solicitation conference
price
price analysis
price competition
price negotiation memorandum (PNM)
pricing
prime contractor
privity of contract
procurement
procurement administrative leadtime (PALT)
procurement package
procuring contacting officer (PCO)
producibility
product assurance
production
production baseline
profit
profit analysis
profitability
progress payments
progress payments inventory
prompt payment discount
property administrator
proposal

proprietary data
proprietary right
prospective pricing
protest
provisioning
prudent businessman concept
publicized procurement
purchase order
purchase request
purchasing
purchasing system

Q

qualified bidders list
qualified products (parts) list (QPL)
quality
quality assurance (QA)
quality assurance program
quality control (QC)
quote

R

random sampling
rates and factors
real property
reasonable cost
recurring cost
remedy
request for equitable adjustment (REA)
request for proposal (RFP)
request for quotation (RFQ)
requirement(s)
residual value
responsibility
responsiveness
restricted competition
retroactive pricing
reverse engineering
rights in technical data
risk
risk analysis
risk assessment
risk management
royalty
Rule 4 file

S

salvage value
scope of work
scrap
sealed bidding
second source
section 8(a) contract

set-aside
should cost
show cause
single source
single source
small and disadvantaged business concern
small business concern
sole source
solicitation
source
source selection
source selection advisory council (SSAC)
source selection evaluation board (SSEB)
source selection authority (SSA)
special test equipment (STE)
special tooling
specification
standard
standard commercial item (see commercial item)
statement of work (SOW)
subcontract
subcontractor
supplemental agreement
surety
synopsis
system specification baseline

T

target fee
target price
target profit
teaming agreement
technical analysis
technical evaluation
technical leveling
technical transfusion
termination contracting officer (TCO)
termination for convenience
termination for default
termination liability
terms and conditions
testing
title
total quality management (TQM)
transfers (ownership)
Truth in Negotiations Act (TINA)
two-step procurement (sealed bidding)

U

unallowable cost
undefinitized contractual action (UCA)
underrun (see cost underrun)
unlimited rights

unilateral (modification)
unpriced
unsolicited proposal

V

validation
value
value analysis
value engineering
value engineering change proposal (VECP)
variable cost
vendor
verification
voucher

W

waivers
warranty
waste
weapon system
weighted guidelines profit analysis
will cost
withholding (payment)
work breakdown structure (WBS)
work measurement standards

X

Y

yield

Z

z-factor

LISTING OF AGENCIES

ASBCA -- Armed Services Board of Contract Appeals
DCAA -- Defense Contract Audit Agency
DCIS -- Defense Criminal Investigative Service
DCMC -- Defense Contract Management Command
DLA -- Defense Logistics Agency
DoD -- Department of Defense
GAO -- General Accounting Office
GSA -- General Services Administration
GSCA -- General Services Board of Contract Appeals
OFPP -- Office of Federal Procurement Policy
OMB -- Office of Management and Budget
SBA -- Small Business Administration

Bibliography

- Alston, Frank M., Worthington, Margaret M., and Goldsman, Louis P. Contracting with the Federal Government (Second Edition). New York: John Wiley & Sons, 1988.
- Bedell, Robert P. "The Agendas of the Office of Federal Procurement Policy," National Contract Management Journal, 21: 1-7 (Winter 1988).
- Cannaday, Captain John E. Determination of Baseline Definitions for Contracting Words and Phrases. MS thesis, Air Force Institute of Technology, Wright-Patterson AFB OH, September 1989 (AD-A216350).
- Defense Management Report the President. Office of Secretary of Defense Richard Cheney, July 1989.
- Davis, Alma B. "The Federal Acquisition Educational Program," Contract Management, 27: 12-13, November 1987.
- Federal Acquisition Regulation (FAR). United States Government. Washington DC: Government Printing Office, 1984.
- Fischer, Andrea L. "DoD Needs a Professional Acquisition Corps," Defense Management Journal, 22: 9-11 (Third Quarter, 1986).
- Fox, Ronald J. with James L. Field. The Defense Management Challenge. Boston: Harvard Business School Press, 1988.
- Gansler, Jacques S. Affording Defense. Cambridge MA: The MIT Press, 1989.
- Houle, Cyril O. Continuing Learning in the Professions. San Francisco: Jossey-Bass Inc., 1980.
- Krieger, John D. Prerequisites for the Establishment of a Professional Acquisition Work Force. Los Angeles: HQ Space Division, (AFSC), 1984 (AD-P002763).
- Lamm, David V. "The Professional Body of Knowledge," Contract Management, 25: 30-31 (June 1985).
- Le Breton, Preston P. The Assessment and Development of Professionals: Theory and Practice. Seattle: The University of Washington, 1976.

Loeb, Richard C.; Deputy Associate Administrator, Office of Federal Procurement Policy, Office of Management and Budget. Memorandum for the Administrator Designate, 15 December 1989.

The Many Facets of Contract Management. Brochure, National Contract Management Association, Vienna VA, undated.

NCMA Chapter President's Operating and Reference Manual. Manual, National Contract Management Association, Vienna VA, 31 August 1987.

Newman, Constance Barry; Director, Office of Personnel Management. Correspondence to Deputy Secretary of Defense Donald J. Atwood, 22 January 1990.

A Quest for Excellence. The Final Report to the President by the President's Blue Ribbon Commission on Defense Management (Packard Commission), June 1986.

Raisters, A. "Some Thoughts and Ideas on Professionalism," National Contract Management Journal, 10: 91-108 (Summer 1976).

Report on the Acquisition Work Force. Federal Acquisition Institute (FAI), General Services Administration. Washington DC: Government Printing Office, March 1989.

Ryan, Lt Cdr Daniel F. A Dictionary of Acquisition and Contracting Terms. MS Thesis, Naval Postgraduate School, Monterey CA, September 1988 (AD-A202120).

Sherman, Stanley N. Government Procurement Management (Second Edition). Gaithersburg MD: Wordcrafters Publications, 1985.

Statistical Abstract of the United States 1989. U.S. Department of Commerce, Bureau of the Census. Washington DC: Government Printing Office, 1989.

Thornton, Lt Cdr Connie L. Contracting: A Systematic Body of Knowledge. MS Thesis, Naval Postgraduate School, Monterey CA, December 1987 (AD-A193531).

Thybony, William W. Government Contracting Based on the Federal Acquisition Regulation (Second Revision). Reston VA: Thybony, Inc., 1987.

Ullmann, Stephen. Words and Their Use. New York: Philosophical Library, Inc., 1951.

Werkmeister, William H. The Basis and Structure of Knowledge. New York: Greenwood Press, 1968.

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