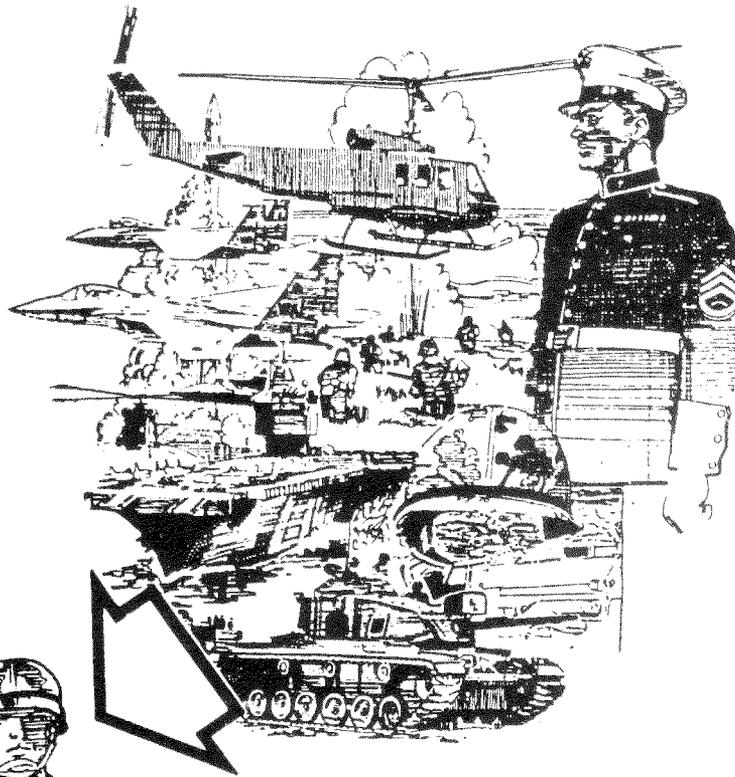


THE ACQUISITION ENHANCEMENT (ACE) PROGRAM REPORT II



VOLUME 1

DECEMBER 1986

DEPARTMENT OF DEFENSE
THE ACQUISITION ENHANCEMENT (ACE II) STUDY GROUP
FORT BELVOIR, VIRGINIA 22060-5426

December 12, 1986

Brigadier General Charles P. Cabell, Jr.
Commandant
Defense Systems Management College
Fort Belvoir, Virginia 22060-5426

Dear General Cabell:

On behalf of the ACE II Study Group, I am pleased to submit to you our final report which provides the findings, conclusions and recommendations produced by our seven-month study. The members of the study group support its conclusions and recommendations.

We wish to emphasize our firm conviction that the Office of the Secretary of Defense requires a focal point to coordinate the efforts of and provide direction to on-going and future education and training activities impacting the acquisition community throughout DOD. We have identified a Defense University of Acquisition Management as that instrument. The university would be an independent activity, administratively supported initially by DSMC. In the event a General/Flag Officer is not immediately available to serve as the University President, we have recommended the Commandant, DSMC be assigned the interim responsibility. We recognize that this will impose an additional burden upon DSMC and hope it is an acceptable one.

We particularly express our appreciation to you and members of your staff who provided the support essential to our efforts.

Sincerely,



EDWARD HIRSCH
Brigadier General, USA (Ret.)
Study Director

ACKNOWLEDGEMENTS

The work of the Acquisition Enhancement (ACE II) Program Study Group could only have been completed with the full cooperation of key personnel from the following learning and support centers currently supporting and training the dedicated professionals of the acquisition work force. Additionally, we appreciate the outstanding support and inputs from the many individuals from the various Services and DoD Agencies staffs.

- Air Force Institute of Technology
Wright Patterson AFB, Dayton, OH
- Defense Quality Management
Support Office, Marietta, GA
- Naval Postgraduate School, Monterey, CA
- Logistics Management Center, Ft. Lee, VA
- Director, Contracts & Business Management,
Office of the Assistant Secretary of
the Navy (S&L), Washington, D.C.
- Lowry Technical Training Center,
Lowry AFB, CO
- Management Engineering & Training Activity
Rock Island, IL
- System Acquisition School, Brooks AFB, TX
- DSMC, Ft. Belvoir, VA
- USAF Occupational Measurement Center
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EXECUTIVE SUMMARY

The Department of Defense has in place a continuing program to enhance the professionalism and effectiveness of the acquisition work force. One initiative within this multi-faceted program was generated in August 1985 when Deputy Secretary of Defense William H. Taft IV directed a comprehensive review of actions needed to promote a more professional contracting, quality assurance, and program management work force. This 3-month effort, directed by the Defense Systems Management College (DSMC), involved all of the Services and the Defense Logistics Agency. The Acquisition Enhancement (ACE) Program report was completed in December 1985. The ACE study:

- o Developed experience prerequisites and increased training requirements for 15 job functions.
- o Drafted new DoD directives and instructions to promulgate the increased requirements.
- o Recommended the establishment of a DoD University of Acquisition Management.
- o Recommended a follow-on study of the DoD's acquisition training base.

In May 1986 DSMC was charged to conduct the follow-on ACE II study which was again supported by all of the Services and DLA. As we conducted our research, it became clear that the individual Services and Agencies were applying significant resources including senior management attention to support the OSD program. However, it became equally clear that these individual efforts, conducted within the management structure existent within DoD, had proved inadequate to provide OSD-mandated training to members of the acquisition work force. Approximately 56,000 civilian and military personnel comprise the segment of the work force which we were tasked to study. Mandatory training requirements, (for civilians only) applicable through 1986, measured against training accomplished reflect a current training backlog which would require approximately 668,000 student man-days to overcome. This backlog increases to approximately 2,000,000 student man-days when the training requirements recommended by the ACE I study become effective in 1987, both because they are more stringent and because they include military personnel.

This very significant training requirement demands a coordinated effort that crosses individual Service and Agency lines. Constrained resources dictate that we obtain maximum benefit from funds, instructor and student time, and facilities as they are applied to the training task. Our review concludes that the coordination and direction required to cope with this problem, as well as the longer term efforts to obtain and maintain the required levels of professionalism, cannot be provided by the current segmented education and training management structure.

We urge the immediate establishment of a Department of Defense University of Acquisition Management to coordinate and direct these efforts under the cognizance of the Under Secretary of Defense for Acquisition. The "Colleges" within the University would be the acquisition elements of the existing DoD learning centers. In the initial phase, the elements would be left in place, but their activities would be coordinated and directed through a consortium of those elements led by a University President plus a small staff. A closer and more direct control could be effected in future years if necessary, as Phase II.

The University will provide the capability to:

- o Manage the reduction of the training backlog as well as the recurring training requirement with greater efficiency by coordinating the use of all resources available within DoD.
- o Reduce unnecessary duplication of courses, encourage the use of non-traditional training methods, and provide a much needed forum for exchange of information.
- o Ensure reliable funding for training by the University working with the Services and Agencies to develop budget and POM inputs.
- o Accredit schools, courses, professors, and students in a cohesive fashion.
- o Assist in efforts to size the work force and track its state of training.
- o Apply competency-based learning concepts throughout the training base.

Our review revealed that if competency based learning concepts are vigorously applied and existing mandatory courses consolidated and modified, student learning will be enhanced and man-days devoted to training can be substantially reduced. For example, an individual in the contracting job function who progresses through the entry and intermediate levels will require only two training courses with a total length of 12-16 weeks under the proposed model curriculum. Compared to the increased training requirements of 1987, this represents a reduction of five to eight courses (depending upon specialty within the contracting function) with a potential saving of up to 12 weeks.

Draft DoD directives to implement the University concept are contained in the report. We recommend they be promulgated without delay and that the University be established at once pending publication of those documents.

Each Service and Agency must establish a comprehensive management information system to track the education, experience, and training status of its acquisition personnel.

SECTION I

INTRODUCTION AND BACKGROUND

THE DoD ACQUISITION WORK FORCE IS THE BASE UPON WHICH DEFENSE ACQUISITION IMPROVEMENTS MUST BE BUILT. THERE IS A CLEAR NEED TO COORDINATE EFFORTS AND PROVIDE COHESIVE DIRECTION. THE PACKARD COMMISSION EXPRESSED CONCERN ABOUT THE QUALITY OF THE ACQUISITION WORK FORCE, PARTICULARLY WITH REGARD TO ITS IMPACT UPON CONTRACTING, QUALITY ASSURANCE, AND PROGRAM MANAGEMENT ACTIVITIES. ACCORDINGLY, IT IS APPROPRIATE TO EXAMINE HOW -- BY SELECTION, BY FORMAL TRAINING, AND/OR BY ON-THE-JOB TRAINING -- PERSONNEL PERFORMANCE MIGHT BE IMPROVED.

In August 1985, Deputy Secretary of Defense William H. Taft IV initiated a comprehensive review designed, among other things, to identify actions needed to promote a more professional contracting, quality assurance, and program management work force. One phase of this review, the Acquisition Enhancement (ACE) Program, was completed in December 1985. The ACE Report:

- o Developed experience prerequisites and training requirements for 15 job functions.
- o Drafted new DoD directives and instructions to promulgate the requirements.
- o Recommended the establishment of a DoD University of Acquisition Management.

- o Recommended a follow-on study of the DoD's acquisition training base.

The Assistant Secretary of Defense (A&L), Dr. James P. Wade, Jr., subsequently directed that the Defense Systems Management College (DSMC) conduct the follow-on study. Brigadier General Edward Hirsch, USA (Ret.), who had directed the original ACE effort, chaired ACE II. Each Service and the Defense Logistics Agency assigned appropriate personnel to support the effort. In addition, the Training Performance and Data Center (TPDC) supported the review process and developed appropriate data bases to document the requirements. The University of Central Florida provided contractual support.

The study group recognized from the outset that improving the training base was but one step--albeit a significant step--toward the objective of enhancing the professionalism of the acquisition work force. We remained mindful that we were to address just that segment of the work force composed of civilian and military personnel serving in the contracting, quality assurance, and program management functions identified in Table 1.

The Packard Commission's report asserts that the training of contracting personnel within DoD is incomplete and that this has a direct and adverse impact on the performance of this segment of the procurement work force. This assertion was generally substantiated by a DoD Inspector General audit of DoD procurement training conducted at the request of the Deputy Secretary of Defense. The purpose of the audit was to determine if intermediate- and senior-level contracting personnel were receiving the mandatory training outlined in DoD Manual 1430.10-M-1. The auditors visited 24 DoD activities during the period June through November 1982 and issued the final report 14 February 1984. The I.G. found that 67 percent of all intermediate- and senior-level professional contracting personnel at the visited activities had not taken all of the mandatory training. Since that time, the individual Services and DoD Agencies, with the encouragement of OSD, have attempted to provide the mandatory training to those requiring it.

JOB FUNCTIONS AND OFFICIAL TITLES/SERIES
ADDRESSED IN THE ACE STUDY

<u>ACE JOB FUNCTIONS</u>	<u>OPM OFFICIAL TITLES/SERIES</u>
1. Program Manager	1. a. Engineer/800 b. Program Manager/340
2. Deputy Program Manager	2. a. Engineer/800 b. Program Manager/340
3. Business/Financial Manager	3. a. Program Analyst/345 b. Budget Analyst/560
4. Contracting Officer	4. Contract Specialist/1102
5. Contract Negotiator	5. Contract Negotiator/1102
6. Contract Specialist	6. Contract Specialist/1102
7. Contract Administrator	7. a. Contract Administrator/1102 b. Contract Termination Specialist/1102
8. Procurement Analyst	8. Procurement Analyst/1102
9. Price Analyst	9. Contract Price/Cost Analyst/1102
10. Quality Assurance Specialist	10. Quality Assurance Specialist/1910
11. Procurement Clerk	11. Procurement Clerk/1106
12. Procurement Assistant	12. Procurement Assistant/1106
13. Purchasing Series	13. Purchasing Agent/1105
14. Industrial Specialist	14. Industrial Specialist/1150
15. Property Administrator	15. a. Industrial Property Management Specialist/1103 b. Industrial Property Clearance Specialist/1103

Section I, Table 1

SECTION II

HOW LARGE IS THE TRAINING TASK —THE NUMBERS

THE DoD DOES NOT CURRENTLY HAVE A METHOD CAPABLE OF IDENTIFYING AND TRACKING THE SIZE, COMPOSITION, OR STATE OF TRAINING OF ITS ACQUISITION WORK FORCE IN A TIMELY FASHION. ABSENT SUCH A CAPABILITY, DoD CANNOT EFFECTIVELY OR EFFICIENTLY CONDUCT PLANNING, PROGRAMMING, OR BUDGETING ACTIONS RELATED TO THAT WORK FORCE. INDIVIDUAL SERVICE AND AGENCY TRAINING EFFORTS, THOUGH SUBSTANTIAL, MEASURED AGAINST OSD-DIRECTED OBJECTIVES HAVE FAILED TO ATTAIN THOSE OBJECTIVES.

The OSD-directed training objectives to be effective in 1987 will be more quantitatively and qualitatively demanding. Annual accessions to the work force generate significant additional training requirements.

The first tasks addressed by the study group were to: 1) determine the size of the work force and the current extent of the training deficiency by job function and level of experience and 2) ascertain how many members of the work force had yet to attend specific mandatory courses.

Obtaining the data proved to be a formidable task; it was not readily available at OSD nor within any Service or Agency. The data were generated only after extensive and time-consuming efforts by individuals in each Service and Agency. Thus, early in the study a significant problem became apparent; a comprehensive management information system for education and training of the acquisition work force does not exist and is recommended.

Prior to formation of the study group, the Air Force Civilian Personnel Management Center initiated a project called COPPER PURE, which was designed to update the Personnel Data System-Civilian (PDS-C) training records. For civilian employees, this was a timely coincidence that provided the needed data. On the military side, the data were extracted from the military personnel training files.

The Army military had less than 500 officers and no enlisted personnel assigned to the contracting, quality assurance, and program management work force. Therefore, the U.S. Army Military Personnel Center manually extracted the training information directly from personnel files. The Army Materiel Command in conjunction with the Army Civilian Personnel Center initiated a survey to collect the Army civilian data. The data were tabulated and extrapolated to approximately the 90 percent confidence level.

The Navy and Marines used the survey approach for both military and civilian personnel. Of the categories of personnel requiring mandatory training, reliable data could be generated on only three (Table 2). Data for the remaining categories were obtained by extrapolation (and included in Tables 3-8). The extrapolation was performed as follows: The number of personnel assigned to each job function was divided by the number of usable surveys returned and the result multiplied by the

number of surveyed personnel reported as being trained. This number is reported as the number trained.

The Defense Logistics Agency (DLA) and the other DoD Agencies used a combination of methods, other than surveys, to obtain the required information.

The results of this extensive effort are presented in Tables 1-8.

Table 1 identifies the training status based on the mandatory training requirements that existed prior to and during 1986. These requirements were promulgated by DoD Manual 1430.10-M-1 and DoD Manual 1430.10-M-2 and applied only to the civilian work force. There was no mandatory training for military personnel. The table shows each job series by experience level and service. The number of mandatory courses are shown in parentheses beside the various levels. Training Requirements (TR) are the number of personnel assigned times the number of mandatory courses for a particular series and level. The Training Requirements Met (TRM) column represents the number of those requirements that have been met. New Requirements (New Rqmts) is equal to the number of annual accessions times the number of mandatory courses. It is clear that the significant efforts by DoD to train the acquisition work force to the minimum level established by OSD -- 85 percent -- have not been successful.

Table 2 addresses the training status based on the future increased mandatory training requirements as outlined in DoD Directives 5000.23 and 5000.48 and Public Law 99-145. The DoD Directives 5000.23 and 5000.48 increased the mandatory training requirements for civilian personnel and also included military personnel. Public Law 99-145 sets forth training requirements for program managers and general/flag officers, which are included in DoDD 5000.23.

Tables 3 and 4, respectively, depict the military and civilian training backlog by course.

Table 5 indicates the total military/civilian backlog by course.

Tables 6 & 7, respectively, show the military and civilian recurring training requirements by course.

Table 8 is a consolidation of the recurring training requirements by course for both military and civilian personnel.

Table 9 shows the current size and composition of the work force.

In all of the above tables, the annual accession data were translated as recurring training requirements. These numbers were counted on a one-to-one basis assuming that all new accessions (new personnel in the work force) arrived without mandatory training. The one exception to this was in determining the accessions for the Program Management Course (PMC) taught at the Defense Systems Management College (DSMC). The Services generally used a factor of approximately seven to determine the number of accessions (which subsequently translates as requirements). As an example, if a Service has 25 major program managers (PMs), the number of accessions (requirements) may be shown as 175. This approach is necessary to supply the pool of personnel required to reliably support the requirement for the 25 PMs. Individuals comprising this pool would probably attend the course years prior to becoming eligible for PM of a major program. During the interim, the pool will have been reduced in size. Factors contributing to this reduction include retirement, non-selection for promotion to Colonel/Captain/GM-15 (the minimum rank associated with the PM of a

major program) or non-availability when a specific vacancy must be filled. The pool must also be responsive to other needs. Many system acquisition programs demand unique skills which cannot be anticipated prior to the actual need; this demands availability of more than one candidate for each potential vacancy. Further, each of the Services currently requires PMC attendance for many of its Deputy PMs and other members of the management team.

	STATUS OF TRAINING CIVILIAN																			
	ARMY ¹				NAVY ²				AIR FORCE ³				DLA ³				OTHER DoD AGENCIES ³			
	CONTRACTING (GS-1102)				CONTRACTING (GS-1102)				CONTRACTING (GS-1102)				CONTRACTING (GS-1102)				CONTRACTING (GS-1102)			
	TR	TRM	% TRND	NEW RQMTS	TR	TRM	% TRND	NEW RQMTS	TR	TRM	% TRND	NEW RQMTS	TR	TRM	% TRND	NEW RQMTS	TR	TRM	% TRND	NEW RQMTS
Level I(3)*	3,435	3,342	97%	171	2,073	—	—	207	3,630	2,091	58%	195	6,315	3,433	54%	900	10	1	10%	0
Level II(2-3)	7,926	5,719	72%	720	5,214	2,435	47%	522	8,286	4,502	54%	394	6,280	4,292	68%	720	60	38	63%	6
Level III(2)	1,752	1,080	62%	82	1,558	476	31%	156	2,122	929	44%	104	1,128	175	2%	60	90	27	30%	10
	PROP. ADMIN. (GS-1103)				PROP. ADMIN. (GS-1103)				PROP. ADMIN. (GS-1103)				PROP. ADMIN. (GS-1103)				PROP. ADMIN. (GS-1103)			
Level I(3)	72	12	17%	6	54	—	—	6	102	9	9%	6	153	51	33%	12	0	0	0%	0
Level II(2)	276	110	40%	42	286	—	—	28	350	29	8%	18	614	77	13%	100	0	0	0%	0
Level III(2)	0	0	0%	2	0	N/A	N/A	N/A	46	5	11%	2	32	3	9%	0	2	4	200%	0
	INDUSTRIAL SPECIALIST (GS-1150)				INDUSTRIAL SPECIALIST (GS-1150)				INDUSTRIAL SPECIALIST (GS-1150)				INDUSTRIAL SPECIALIST (GS-1150)				INDUSTRIAL SPECIALIST (GS-1150)			
Level I(2)	98	56	57%	4	40	—	—	4	56	7	13%	2	156	68	44%	66	0	0	0%	0
Level II(3)	1,383	573	41%	102	1,605	—	—	159	486	52	11%	24	2,958	914	31%	609	0	0	0%	0
Level III(2)	166	76	46%	6	236	—	—	22	56	8	14%	2	122	24	20%	4	10	5	50%	0
TOTAL	15,108	10,968	73%	1,135	11,066			1,104	15,134	7,632	50%	747	17,758	9,037	51%	2,471	172	75	44%	16

NOTES:

1. Army data obtained by survey and extrapolated to approximately 90% confidence level.
2. Not able to generate reliable data from existing training files or surveys except in cases noted.
3. Actual data obtained from training records. Air Force data being updated under COPPER PURE.

TR = Training Requirements (number of personnel assigned times the number of mandatory courses).
 TRM = Training Requirements Met (total personnel trained in each mandatory course).
 NEW RQMTS = New Accessions Training Requirements (accessions times courses).

*Numbers in parentheses after level indicate number of courses. Dependent upon specialty/assignment.

**CAUTION: DATA DO NOT ACCURATELY REFLECT
 WAIVERS GRANTED FOR EXPERIENCE OR OTHER
 EDUCATION AND TRAINING COMPLETED.**

**DOD MANDATORY TRAINING
 REQUIREMENTS ARE THOSE
 IN EFFECT AS OF JUNE 1986.**

STATUS OF TRAINING
MILITARY/CIVILIAN

	<u>ARMY¹</u>				<u>NAVY²</u>				<u>AIR FORCE³</u>				<u>DLA³</u>				<u>OTHER DoD AGENCIES³</u>			
	<u>CONTRACTING (GS-1102)</u>				<u>CONTRACTING (GS-1102)</u>				<u>CONTRACTING (GS-1102)</u>				<u>CONTRACTING (GS-1102)</u>				<u>CONTRACTING (GS-1102)</u>			
	TR	TRM	% TRND	NEW RQMTS	TR	TRM	% TRND	NEW RQMTS	TR	TRM	% TRND	NEW RQMTS	TR	TRM	% TRND	NEW RQMTS	TR	TRM	% TRND	NEW RQMTS
Level II(5)*	6,700	3,522	53%	440	5,095	—	—	510	18,130	3,468	19%	1,310	6,315	3,433	54%	1,500	10	1	10%	0
Level II(2-5)	8,308	5,982	72%	864	5,522	2,639	48%	552	9,282	4,549	49%	482	6,280	4,292	68%	720	60	38	63%	6
Level III(2)	2,114	1,099	52%	160	1,782	476	27%	178	2,890	1,072	37%	172	1,128	175	2%	60	90	27	30%	10
	<u>PROCUREMENT CLERK (GS-1106)</u>				<u>PROCUREMENT CLERK (GS-1106)</u>				<u>PROCUREMENT CLERK (GS-1106)</u>				<u>PROCUREMENT CLERK (GS-1106)</u>				<u>PROCUREMENT CLERK (GS-1106)</u>			
Level II(2)	622	479	77%	14	818	—	—	82	860	28	3%	44	504	0	0%	50	12	0	0%	2
	<u>PURCHASING (GS-1105)</u>				<u>PURCHASING (GS-1105)</u>				<u>PURCHASING (GS-1105)</u>				<u>PURCHASING (GS-1105)</u>				<u>PURCHASING (GS-1105)</u>			
Level II(2)	2,128	1,631	77%	180	3,150	—	—	316	842	15	2%	42	134	0	0%	24	12	1	10%	2
Level II(2)	74	36	49%	6	110	—	—	10	8	0	0%	0	4	0	0%	2	0	0	0%	0
	<u>PROGRAM MANAGERS</u>				<u>PROGRAM MANAGERS</u>				<u>PROGRAM MANAGERS</u>				<u>PROGRAM MANAGERS</u>				<u>PROGRAM MANAGERS</u>			
Level IV(1)	20	15	75%	91	38	2	5%	266	35	12	34%	250	0	0	0%	0	5	0	0%	10
	<u>BUSINESS/FINANCIAL MANAGER</u>				<u>BUSINESS/FINANCIAL MANAGER</u>				<u>BUSINESS/FINANCIAL MANAGER</u>				<u>BUSINESS/FINANCIAL MANAGER</u>				<u>BUSINESS/FINANCIAL MANAGER</u>			
Level II(3) & Above	0	0	0%	0	234	—	—	24	0	0	0%	0	0	0	0%	0	195	13	7%	21
	<u>QUALITY ASSURANCE (GS-1910)</u>				<u>QUALITY ASSURANCE (GS-1910)</u>				<u>QUALITY ASSURANCE (GS-1910)</u>				<u>QUALITY ASSURANCE (GS-1910)</u>				<u>QUALITY ASSURANCE (GS-1910)</u>			
Level II(2)	706	1	0%	44	370	—	—	36	116	55	47%	6	1,314	0	0%	466	0	0	0%	0
Level III(1)	2,233	483	22%	176	2,385	—	—	239	1,381	0	0%	69	5,890	0	0%	1,134	3	0	0%	0
Level III(2)	342	232	68%	38	280	—	—	26	244	21	9%	12	390	95	24%	16	2	0	0%	0
	<u>PROP. ADMIN. (GS-1103)</u>				<u>PROP. ADMIN. (GS-1103)</u>				<u>PROP. ADMIN. (GS-1103)</u>				<u>PROP. ADMIN. (GS-1103)</u>				<u>PROP. ADMIN. (GS-1103)</u>			
Level II(2)	96	12	13%	8	72	—	—	8	136	9	7%	8	204	51	25%	16	0	0	0%	0
Level II(2)	276	110	40%	42	282	—	—	28	350	29	8%	18	614	77	13%	100	0	0	0%	0
Level III(2)	0	0	0%	2	0	N/A	N/A	N/A	46	5	11%	2	32	3	9%	0	2	2	100%	0
	<u>INDUSTRIAL SPECIALIST (GS-1150)</u>				<u>INDUSTRIAL SPECIALIST (GS-1150)</u>				<u>INDUSTRIAL SPECIALIST (GS-1150)</u>				<u>INDUSTRIAL SPECIALIST (GS-1150)</u>				<u>INDUSTRIAL SPECIALIST (GS-1150)</u>			
Level II(2)	98	56	57%	4	40	—	—	4	56	7	13%	2	156	68	44%	66	0	0	0%	0
Level III(1)	1,383	573	41%	102	1,605	—	—	159	486	52	11%	24	2,958	914	31%	609	0	0	0%	0
Level III(2)	166	76	46%	6	236	—	—	22	56	8	14%	2	122	24	20%	4	10	5	50%	0
TOTAL	25,266	14,307	57%	2,177	22,019			2,460	34,918	9,330	27%	2,443	25,994	9,132	35%	4,767	401	87	22%	41

NOTES:

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2. Not able to generate reliable data from existing training files or surveys except in cases noted.
3. Actual data obtained from training records. Air Force data being updated under COPPER PURE.

TR = Training Requirements (number of personnel assigned times the number of mandatory courses).
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 *Numbers in parentheses after level indicate number of courses. Dependent upon specialty/assignment.

CAUTION: DATA DO NOT ACCURATELY REFLECT WAIVERS GRANTED FOR EXPERIENCE OR OTHER EDUCATION AND TRAINING COMPLETED.

DOD MANDATORY TRAINING REQUIREMENTS ARE THOSE EXPECTED TO BE PROMULGATED BY 1987 AND REPRESENT SIGNIFICANTLY INCREASED REQUIREMENTS, E.G., ALL MILITARY ACQUISITION PARTICIPANTS MUST RECEIVE SAME TRAINING AS CIVILIAN PARTICIPANTS.

Data as of August 1986

Military
Training Backlog by Course

Course Title (1)	-Army-		-Navy-		-Air Force-		-DLA-		Other DoD Agencies		-Total-	
	(2)	(3)	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog
	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog
Advanced Contract Administration	96	20	77	52	249	217	0	0	0	0	422	289
Advanced Management Course	23	20	19	16	48	48	0	0	0	0	90	84
Advanced Property Administration	0	0	0	0	0	0	0	0	0	0	0	0
Business Management Course	0	0	40	26	0	0	0	0	0	0	40	26
Contract Administration Course (Basic)	195	191	328	328	2416	2416	0	0	0	0	2939	2935
Defense Acquisition & Contracting Executive Seminar	181	181	112	112	384	241	0	0	0	0	677	534
Defense Contract Property Disposition	0	0	0	0	0	0	0	0	0	0	0	0
Defense Contracts Management for Technical Personnel	0	0	0	0	0	0	0	0	0	0	0	0
Defense Contracts Negotiation Workshop	195	180	328	196	2416	2172	0	0	0	0	2939	2548
Defense Cost and Price Analysis	98	83	164	65	1208	957	0	0	0	0	1470	1105
Defense Small Purchase Course	195	195	328	295	2416	2416	0	0	0	0	2939	2906
Executive Center Seminars	23	20	19	16	48	48	0	0	0	0	90	84
Executive Round Table	23	20	19	16	48	48	0	0	0	0	90	84
Federal Executive Institute Program	23	20	19	16	48	48	0	0	0	0	90	84
Financial Management in Weapon Systems Acquisition	0	0	40	33	0	0	0	0	0	0	40	33
Government Contract Law	191	139	154	86	498	363	0	0	0	0	843	588
Industrial Property Administration	0	0	0	0	0	0	0	0	0	0	0	0
Introduction to Data Processing	0	0	0	0	0	0	0	0	0	0	0	0
Management Development Seminar	23	20	19	16	48	48	0	0	0	0	90	84
Management of Defense Acquisition Contracts (Advanced)	96	20	77	52	249	217	0	0	0	0	422	289
Management of Defense Acquisition Contracts (Basic)	195	64	368	93	2416	1786	0	0	0	0	2979	1943
Management of Managers Course	23	20	19	16	48	48	0	0	0	0	90	84
Managerial Assessment Orientation Seminar	23	20	19	16	48	48	0	0	0	0	90	84
Personnel Management for Executive Conference	23	20	19	16	48	48	0	0	0	0	90	84
Principles of Contract Pricing	98	83	164	65	1208	957	0	0	0	0	1470	1105
Production Management I	0	0	0	0	0	0	0	0	0	0	0	0
Production Management II	0	0	0	0	0	0	0	0	0	0	0	0
Program Management Course	20	5	38	36	35	23	0	0	0	0	93	64
Quality & Reliability Four Week Course*	0	0	0	0	0	0	0	0	0	0	0	0
Quality Assurance Management I	0	0	0	0	0	0	0	0	0	0	0	0
Quality Assurance Management II	0	0	36	36	0	0	0	0	0	0	36	36
Total:	1,744	1,321	2,406	1,603	13,879	12,149	0	0	0	0	18,029	15,073

(1) "Course Title" is the list of courses which apply to the training requirements of contracting, quality assurance and program management personnel as identified by DoDD 5000.XX and DoDD 5000.23.

(2) "Assigned" is the number of contracting, quality assurance, and program management personnel who are required to complete a course.

The assigned figures for each service or agency were determined by summing the number of personnel assigned for all job functions that are required to complete a course. When more than one course can satisfy the training requirements for a job function the number of assigned figures were evenly distributed among the equivalent courses.

(3) "Backlog" is the number of assigned personnel who have not completed a course.

The backlog figures for each service or agency were determined by summing the individual backlogs figures for all job functions that are required to complete a course. When more than one course can satisfy the training requirements for a job function the backlog figures were evenly distributed among the equivalent courses.

* Four-week formal training covering essential subjects to be recommended by Defense Quality & Reliability Assurance Career Management Board

Data as of August 1986

Civilian
Training Backlog by Course

Course Title (1)	-Army-		-Navy-		-Air Force-		-DLA-		Other DoD Agencies		-Total-	
	(2) Assigned	(3) Backlog	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog
Advanced Contract Administration	2230	753	1599	759	2155	1319	2064	881	15	6	8063	3718
Advanced Management Course	141	25	125	93	154	114	105	67	7	4	532	303
Advanced Property Administration	138	83	143	143	175	175	307	201	0	0	763	602
Business Management Course	0	0	38	27	0	0	0	0	65	56	103	83
Contract Administration Course (Basic)	1869	1064	1702	1534	1667	1504	1487	1215	8	8	6733	5325
Defense Acquisition & Contracting Executive Seminar	959	566	898	578	1112	470	641	641	51	37	3661	2292
Defense Contract Property Disposition	24	20	18	9	34	34	51	51	0	0	127	114
Defense Contracts Management for Technical Personnel	353	352	185	185	58	3	657	657	0	0	1253	1197
Defense Contracts Negotiation Workshop	1145	678	691	355	1210	741	1263	460	2	2	4311	2236
Defense Cost and Price Analysis	591	275	373	196	607	328	633	36	1	1	2205	836
Defense Small Purchase Course	2520	321	2675	1123	2061	1818	1582	1582	14	13	8852	4857
Executive Center Seminars	141	25	125	93	154	114	105	67	7	4	532	303
Executive Round Table	141	25	125	93	154	114	105	67	7	4	532	303
Federal Executive Institute Program	141	25	125	93	154	114	105	67	7	4	532	303
Financial Management in Weapon Systems Acquisition	0	0	38	30	0	0	0	0	65	64	103	94
Government Contract Law	4562	1345	3285	2299	4480	1721	4433	1829	30	10	16790	7204
Industrial Property Administration	24	20	18	9	34	34	51	18	0	0	127	90
Introduction to Data Processing	24	24	18	9	34	34	51	51	0	0	127	118
Management Development Seminar	141	25	125	93	154	114	105	67	7	4	532	303
Management of Defense Acquisition Contracts (Advanced)	2230	753	1599	759	2155	1319	2064	881	15	6	8063	3718
Management of Defense Acquisition Contracts (Basic)	1869	447	1740	1043	1667	947	1487	278	73	69	6836	2784
Management of Managers Course	141	25	125	93	154	114	105	67	7	4	532	303
Managerial Assessment Orientation Seminar	141	25	125	93	154	114	105	67	7	4	532	303
Personnel Management for Executive Conference	141	25	125	93	154	114	105	67	7	4	532	303
Principles of Contract Pricing	591	275	373	196	607	328	633	36	1	1	2205	836
Production Management I	49	39	20	20	28	28	78	36	0	0	175	123
Production Management II	461	304	535	535	162	162	986	680	0	0	2144	1681
Program Management Course	0	0	0	0	0	0	0	0	5	5	5	5
Quality & Reliability Four Week Course*	353	353	185	185	58	58	657	657	0	0	1253	1253
Quality Assurance Management I	2233	1750	2385	2385	1381	1381	5890	5890	3	3	11892	11409
Quality Assurance Management II	171	125	104	83	122	122	195	195	1	1	593	526
Total:	23,524	9,747	19,622	13,215	21,039	13,438	26,050	16,811	405	314	90,640	53,525

(1) "Course Title" is the list of courses which apply to the training requirements of contracting, quality assurance and program management personnel as identified by DoDD 5000.XX and DoDD 5000.23.

(2) "Assigned" is the number of contracting, quality assurance, and program management personnel who are required to complete a course.

The assigned figures for each service or agency were determined by summing the number of personnel assigned for all job functions that are required to complete a course. When more than one course can satisfy the training requirements for a job function the number of assigned figures were evenly distributed among the equivalent courses.

(3) "Backlog" is the number of assigned personnel who have not completed a course.

The backlog figures for each service or agency were determined by summing the individual backlogs figures for all job functions that are required to complete a course. When more than one course can satisfy the training requirements for a job function the backlog figures were evenly distributed among the equivalent courses.

* Four-week formal training covering essential subjects to be recommended by Defense Quality & Reliability Assurance Career Management Board

Data as of August 1986

Civilian & Military
Training Backlog by Course

(1) Course Title	-Army-		-Navy-		-Air Force-		-DLA-		Other DoD Agencies		-Total-	
	(2) Assigned	(3) Backlog	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog	Assigned	Backlog
Advanced Contract Administration	2326	773	1676	811	2404	1536	2064	881	15	6	8485	4007
Advanced Management Course	164	45	144	109	202	162	105	67	7	4	622	387
Advanced Property Administration	138	83	143	143	175	175	307	201	0	0	763	602
Business Management Course	0	0	78	53	0	0	0	0	65	56	143	109
Contract Administration Course (Basic)	2064	1255	2030	1862	4083	3920	1487	1215	8	8	9672	8260
Defense Acquisition & Contracting Executive Seminar	1140	747	1010	690	1496	711	641	641	51	37	4338	2826
Defense Contract Property Disposition	24	20	18	9	34	34	51	51	0	0	127	114
Defense Contracts Management for Technical Personnel	353	352	185	185	58	3	657	657	0	0	1253	1197
Defense Contracts Negotiation Workshop	1340	858	1019	551	3626	2913	1263	460	2	2	7250	4784
Defense Cost and Price Analysis	689	358	537	261	1815	1285	633	36	1	1	3675	1941
Defense Small Purchase Course	2715	516	3003	1418	4477	4234	1582	1582	14	13	11791	7763
Executive Center Seminars	164	45	144	109	202	162	105	67	7	4	622	387
Executive Round Table	164	45	144	109	202	162	105	67	7	4	622	387
Federal Executive Institute Program	164	45	144	109	202	162	105	67	7	4	622	387
Financial Management in Weapon Systems Acquisition	0	0	78	63	0	0	0	0	65	64	143	127
Government Contract Law	4753	1484	3439	2385	4978	2084	4433	1829	30	10	17633	7792
Industrial Property Administration	24	20	18	9	34	34	51	51	0	0	127	90
Introduction to Data Processing	24	24	18	9	34	34	51	51	0	0	127	118
Management Development Seminar	164	45	144	109	202	162	105	67	7	4	622	387
Management of Defense Acquisition Contracts (Advanced)	2326	773	1676	811	2404	1536	2064	881	15	6	8485	4007
Management of Defense Acquisition Contracts (Basic)	2064	511	2108	1136	4083	2733	1487	278	73	69	9815	4727
Management of Managers Course	164	45	144	109	202	162	105	67	7	4	622	387
Managerial Assessment Orientation Seminar	164	45	144	109	202	162	105	67	7	4	622	387
Personnel Management for Executive Conference	164	45	144	109	202	162	105	67	7	4	622	387
Principles of Contract Pricing	689	358	537	261	1815	1285	633	36	1	1	3675	1941
Production Management I	49	39	20	20	28	28	78	36	0	0	175	123
Production Management II	461	304	535	535	162	162	986	680	0	0	2144	1681
Program Management Course	20	5	38	36	35	23	0	0	5	5	98	69
Quality & Reliability Four Week Course*	353	353	185	185	58	58	657	657	0	0	1253	1253
Quality Assurance Management I	2233	1750	2385	2385	1381	1381	5890	5890	3	3	11892	11409
Quality Assurance Management II	171	125	140	119	122	122	195	195	1	1	629	562
Total:	25,268	11,068	22,028	14,818	34,918	25,587	26,050	16,811	405	314	108,669	68,598

- (1) "Course Title" is the list of courses which apply to the training requirements of contracting, quality assurance and program management personnel as identified by DoDD 5000.XX and DoDD 5000.23.
- (2) "Assigned" is the number of contracting, quality assurance, and program management personnel who are required to complete a course. The assigned figures for each service or agency were determined by summing the number of personnel assigned for all job functions that are required to complete a course. When more than one course can satisfy the training requirements for a job function the number of assigned figures were evenly distributed among the equivalent courses.
- (3) "Backlog" is the number of assigned personnel who have not completed a course. The backlog figures for each service or agency were determined by summing the individual backlogs figures for all job functions that are required to complete a course. When more than one course can satisfy the training requirements for a job function the backlog figures were evenly distributed among the equivalent courses.

* Four-week formal training covering essential subjects to be recommended by Defense Quality & Reliability Assurance Career Management Board

Data as of August 1986

Civilian
Recurring Training Requirement by Course

Course Title (1)	-Army-	-Navy-	-Air Force-	-DLA-	Other DoD Agencies	-Total-
	(2) Annual Requirement	Annual Requirement	Annual Requirement	Annual Requirement	Annual Requirement	Annual Requirement
Advanced Contract Administration	199	159	103	282	2	745
Advanced Management Course	8	12	8	5	1	34
Advanced Property Administration	21	14	9	50	0	94
Business Management Course	0	4	0	0	7	11
Contract Administration Course (Basic)	108	171	88	337	1	705
Defense Acquisition & Contracting Executive Seminar	44	89	54	32	5	224
Defense Contract Property Disposition	2	2	2	4	0	10
Defense Contracts Management for Technical Personnel	22	18	3	233	0	276
Defense Contracts Negotiation Workshop	57	69	65	300	0	491
Defense Cost and Price Analysis	30	37	32	151	0	250
Defense Small Purchase Course	154	268	108	337	2	869
Executive Center Seminars	8	12	8	5	1	34
Executive Round Table	8	12	8	5	1	34
Federal Executive Institute Program	8	12	8	5	1	34
Financial Management in Weapon Systems Acquisition	0	4	0	0	7	11
Government Contract Law	415	328	214	613	3	1573
Industrial Property Administration	2	2	2	4	0	10
Introduction to Data Processing	2	2	2	4	0	10
Management Development Seminar	8	12	8	5	1	34
Management of Defense Acquisition Contracts (Advanced)	199	159	103	282	2	745
Management of Defense Acquisition Contracts (Basic)	108	175	88	337	8	716
Management of Managers Course	8	12	8	5	1	34
Managerial Assessment Orientation Seminar	8	12	8	5	1	34
Personnel Management for Executive Conference	8	12	8	5	1	34
Principles of Contract Pricing	30	37	32	151	0	250
Production Management I	2	2	1	33	0	38
Production Management II	34	53	8	203	0	298
Program Management Course	0	0	0	0	10	10
Quality & Reliability Four Week Course*	22	18	3	233	0	276
Quality Assurance Management I	176	239	69	1134	0	1618
Quality Assurance Management II	19	10	6	8	0	43
Total:	1,710	1,956	1,056	4,768	55	9,545

(1) "Course Title" is the list of courses which apply to the training requirements of contracting, quality assurance and program management personnel as identified by DoDD 5000.XX and DoDD 5000.23.

(2) "Annual" Requirement is the number of new hires per year who will require training in a course. Annual Requirement figures for each service or agency were determined by summing the predicted number of new hires for all job functions that are required to complete a course. When more than one course can satisfy the training requirements for a job function the annual requirement figures were evenly distributed among the equivalent courses.

* Four week formal training covering essential subjects to be recommended by Defense Quality & Reliability Assurance Career Management Board

Data as of August 1986

Military
Recurring Training Requirement by Course

Course Title (1)	-Army-	-Navy-	-Air Force-	-DLA-	Other DoD Agencies	-Total-
	(2) Annual Requirement	Annual Requirement	Annual Requirement	Annual Requirement	Annual Requirement	Annual Requirement
Advanced Contract Administration	36	8	22	0	0	66
Advanced Management Course	5	2	4	0	0	11
Advanced Property Administration	0	0	0	0	0	0
Business Management Course	0	4	0	0	0	4
Contract Administration Course (Basic)	31	33	197	0	0	261
Defense Acquisition & Contracting Executive Seminar	39	11	34	0	0	84
Defense Contract Property Disposition	0	0	0	0	0	0
Defense Contracts Management for Technical Personnel	0	0	0	0	0	0
Defense Contracts Negotiation Workshop	31	33	197	0	0	261
Defense Cost and Price Analysis	16	17	99	0	0	132
Defense Small Purchase Course	31	33	197	0	0	261
Executive Center Seminars	5	2	4	0	0	11
Executive Round Table	5	2	4	0	0	11
Federal Executive Institute Program	5	2	4	0	0	11
Financial Management in Weapon Systems Acquisition	0	4	0	0	0	4
Government Contract Law	72	15	44	0	0	131
Industrial Property Administration	0	0	0	0	0	0
Introduction to Data Processing	0	0	0	0	0	0
Management Development Seminar	5	2	4	0	0	11
Management of Defense Acquisition Contracts (Advanced)	36	8	22	0	0	66
Management of Defense Acquisition Contracts (Basic)	31	37	197	0	0	265
Management of Managers Course	5	2	4	0	0	11
Managerial Assessment Orientation Seminar	5	2	4	0	0	11
Personnel Management for Executive Conference	5	2	4	0	0	11
Principles of Contract Pricing	16	17	99	0	0	132
Production Management I	0	0	0	0	0	0
Production Management II	0	0	0	0	0	0
Program Management Course	91	266	250	0	0	607
Quality & Reliability Four Week Course*	0	0	0	0	0	0
Quality Assurance Management I	0	0	0	0	0	0
Quality Assurance Management II	0	3	0	0	0	3
Total:	470	505	1,390	0	0	2,365

(1) "Course Title" is the list of courses which apply to the training requirements of contracting, quality assurance and program management personnel as identified by DoDD 5000.XX and DoDD 5000.23.

(2) "Annual Requirement" is the number of new hires per year who will require training in a course. Annual Requirement figures for each service or agency were determined by summing the predicted number of new hires for all job functions that are required to complete a course. When more than one course can satisfy the training requirements for a job function the annual requirement figures were evenly distributed among the equivalent courses.

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Data as of August 1986

Military & Civilian
Recurring Training Requirement by Course

Course Title (1)	-Army-	-Navy-	-Air Force-	-DLA-	Other DoD Agencies	-Total-
	(2) Annual Requirement	Annual Requirement	Annual Requirement	Annual Requirement	Annual Requirement	Annual Requirement
Advanced Contract Administration	235	167	125	282	2	811
Advanced Management Course	13	14	12	5	1	45
Advanced Property Administration	21	14	9	50	0	94
Business Management Course	0	8	0	0	7	15
Contract Administration Course (Basic)	139	204	285	337	1	966
Defense Acquisition & Contracting Executive Seminar	83	100	88	32	5	308
Defense Contract Property Disposition	2	2	2	4	0	10
Defense Contracts Management for Technical Personnel	22	18	3	233	0	276
Defense Contracts Negotiation Workshop	88	102	262	300	0	752
Defense Cost and Price Analysis	46	54	131	151	0	382
Defense Small Purchase Course	185	301	305	337	2	1130
Executive Center Seminars	13	14	12	5	1	45
Executive Round Table	13	14	12	5	1	45
Federal Executive Institute Program	13	14	12	5	1	45
Financial Management in Weapon Systems Acquisition	0	8	0	0	7	15
Government Contract Law	487	343	258	613	3	1704
Industrial Property Administration	2	2	2	4	0	10
Introduction to Data Processing	2	2	2	4	0	10
Management Development Seminar	13	14	12	5	1	45
Management of Defense Acquisition Contracts (Advanced)	235	167	125	282	2	811
Management of Defense Acquisition Contracts (Basic)	139	212	285	337	8	981
Management of Managers Course	13	14	12	5	1	45
Managerial Assessment Orientation Seminar	13	14	12	5	1	45
Personnel Management for Executive Conference	13	14	12	5	1	45
Principles of Contract Pricing	46	54	131	151	0	382
Production Management I	2	2	1	33	0	38
Production Management II	34	53	8	203	0	298
Program Management Course	91	266	250	0	10	617
Quality & Reliability Four Week Course*	22	18	3	233	0	276
Quality Assurance Management I	176	239	69	1134	0	1618
Quality Assurance Management II	19	13	6	8	0	46
Total:	2,180	2,461	2,446	4,768	55	11,910

(1) "Course Title" is the list of courses which apply to the training requirements of contracting, quality assurance and program management personnel as identified by DoDD 5000.XX and DoDD 5000.23.

(2) "Annual Requirement" is the number of new hires per year who will require training in a course. Annual Requirement figures for each service or agency were determined by summing the predicted number of new hires for all job functions that are required to complete a course. When more than one course can satisfy the training requirements for a job function the annual requirement figures were evenly distributed among the equivalent courses.

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**Composition of the Work Force
Totals by Service/Agency and Job Series
(Military and Civilian)**

<u>JOB FUNCTION/SERIES</u>	<u>ARMY</u>	<u>NAVY</u>	<u>MARINES</u>	<u>AIR FORCE</u>	<u>DLA</u>	<u>OTHER DoD AGENCIES</u>	<u>TOTAL</u>
Contracting	6,551	4,671	221	9,712	4,967	77	26,199
Procurement Clerk	2,077	1,791	68	1,512	2,190	16	7,654
Purchasing Series	1,101	1,630	108	425	69	6	3,339
* Program Manager (Major)	20	38	3	35	0	5	101
Program Manager (Non-major)	73	113	3	250	0	13	452
Deputy Program Manager	93	158	7	285	0	0	543
Business/Financial Manager	0	78	0	0	0	65	143
Quality Assurance Specialist	2,757	2,777	21	1,495	6,742	4	13,796
Property Administrator	162	161	2	232	374	1	932
Industrial Specialist	<u>593</u>	<u>676</u>	<u>8</u>	<u>218</u>	<u>1,125</u>	<u>5</u>	<u>2,625</u>
	13,427	12,093	441	14,164	15,467	192	55,784

* Major programs as defined in DoD Dir 5000.1.

Section II, Table 9

SECTION III

HOW CAN WE COPE WITH THE QUANTITATIVE TRAINING TASK?

THE TRAINING REQUIREMENT CONFRONTING DoD IS BEYOND THE CAPABILITY OF ANY SERVICE OR AGENCY ACTING INDEPENDENTLY. A COORDINATION EFFORT, USING ALL AVAILABLE RESOURCES, CROSSING SERVICE AND AGENCY LINES, IS REQUIRED.

The magnitude of the training backlog confronting DoD is formidable. Approximately 56,000 civilian and military personnel comprise the segment of the work force with which we are concerned. Mandatory training requirements, applicable through 1986, measured against training accomplished reflect a current training backlog which would require approximately 668,000 student man-days to overcome. This backlog increases to approximately 2,000,000 student man-days when the more stringent training requirements recommended by the ACE I study become effective in 1987. Not only do these figures represent an awesome challenge to our training base, they reflect what amounts to a temporary but significant reduction in mission accomplishment capability by the work force as its "on-the-job" numbers are depleted to permit attendance at training. The requirement to train the work force must be kept in balance with available funds, facilities, and instructors as well as supervisors' perceptions of value added resulting from training received by subordinates.

Table 1 (see note below) reveals that the current capacity of the training base is insufficient and out of balance with the proposed requirements. Nine courses would be unable to keep up with the annual requirement. Twenty courses have insufficient capacity when the backlog figures are factored in. Furthermore, Table 2 shows that the disparity between requirement and capacity will not cure itself over time. Fourteen courses would be unable to satisfy the backlog in 3 years or less. Of these 14, the immediate training requirement exceeds current capacity by more than 200 percent in all but one course.

NOTE:

Five terms need explaining:

1. "Backlog" is the number of personnel awaiting training.
2. "Annual Requirement" is the number of new hires needing training each year.
3. "Immediate Training Requirement" includes the personnel presently in a backlog status plus 1 year's annual requirement.
4. "Current Capacity" is the reported total number of students that can currently be trained in classroom (resident or on-site) each year for a particular training base course in FY 87. "Current Training Capacity" does not include correspondence mode figures.
5. "Required Capacity" (or "Training Load") is the number of personnel who will need to complete training per year to resolve the backlog and to accommodate each year's annual requirement.

Achieving balance appears to require large and unrealistic changes to the current training base. Especially in the first few years, hefty increases in class size, class

offerings per year, instructor personnel, and the associated support costs would all be needed. The previous figures highlight the need to find the most cost-effective options that would re-establish the balance between training requirements and training capacity.

Table 3 shows that training loads become more manageable when the backlog is distributed over 2-5 years. For example, if a 3-year time period is chosen, the required capacity for Advanced Contract Administration would be 2,147. This figure includes the 3-year distribution of the backlog plus the annual requirement from of the 3 years. In Table 3, current training capacity figures are also provided to gauge the difference between current capacity and required capacity.

The 3-year time period was selected for planning purposes. This choice will generate more realistic and attainable training loads. For 11 training base courses, training capacity already exceeds the required capacity when a 3-year time interval is used.

Several possibilities or options are available to achieve balance:

Option 1. **Grant waivers where appropriate.** Several courses with significant backlogs have performance testing, and waivers could be granted based upon these tests. The courses are: Advanced Contract Administration, Advance Property Administration, Contract Administration Course (Basic), Government Contract Law, Principles of Contract Pricing, and Production Management II. Waivers for these and other courses could also be based on experience.

Option 2. **Redistribute the training loads for those courses that have equivalents within the training base which show an excess capacity.** For example, the excess capacity of the Defense Cost and Price Analysis Course could relieve some of the training load of the Principles of Contract Pricing Course, since these courses are considered equivalent.

Option 3. **Identify existing courses outside the training base that may be equivalent.** Courses or combinations of courses that could be used in place of a training base course would increase capacity and also reduce backlog figures. A possible equivalent for the Government Contract Law Course is the Base Contract Law Course taught at Air Force Institute of Technology (AFIT), Wright-Patterson AFB, OH. The Material Acquisition Management Course at Army Logistics Management Center (ALMC), Fort Lee, VA, may be equivalent to the "Basics" portion of the DSMC Program Management Course.

Option 4. **Increase current capacity without using additional resources.** Minor adjustments to class sizes could increase capacity as much as 10 percent. For example, Government Contract Law is offered 31 times per year with a class size of 30. If the class size could be increased by three, the capacity would increase from 930 to 1023. The Advanced Contract Administration Course is offered 29 times per year with a class size of 25. If the class size could be increased by five, the capacity would increase from 725 to 870.

Option 5. Rely on existing correspondence modes to satisfy required capacity.

Two courses have correspondence modes: the Defense Small Purchase Course, which is offered only in the correspondence mode, and the Management of Defense Acquisition Contracts (Basic). The Contract Administration Course (Basic) could be used to meet user requirements through the correspondence mode of the Management of Defense Acquisition Contracts (Basic) since these courses are considered equivalent.

Option 6. Offer additional classes per year. Increasing the number of class offerings each year will increase capacity without incurring development costs.

Option 7. Develop additional correspondence modes where prudent. This mode is ideal for courses whose objectives are primarily knowledge level. The major advantage of this option is that training capacity will always equal the required capacity. A disadvantage is that course completion rests on student initiative.

Option 8. Develop exportable training courses. This option includes video tapes, video discs, satellite communications, and computer-based medias. This option is suitable for personnel who have difficulty with scheduling classroom training or when Temporary Duty (TDY) funding for training is limited.

Option 9. Use additional contract courses to augment training base. This option provides an immediate short-term means to address training

capacity deficiencies and can be turned off when backlogs have been removed and the schools are able to accommodate the annual requirement.

These options form two distinct groups. Options 1-5 make up the first group and are primarily minor adjustments that will require little or no additional resources. These options should be considered first to determine whether or not balance can be achieved without cost. If balance cannot be achieved using options 1-5, then the second group of options, 6-9, should be considered. With extra resources likely, selecting the best option(s) from this group will require a cost-benefit study.

Table 4 provides an initial forecast on which options are recommended to achieve balance for each training base course. These recommendations are based on the backlog being spread over a 3-year time period. Typically, more options are suggested for courses that show large differences between required capacity and current capacity. Annual requirement figures are provided since they influence the selection of options needed to increase capacity over the long haul once the backlog has been removed.

To achieve proper balance, several factors outside the numbers in this section should also be considered. Such factors include the appropriateness and value of each training base course, course length, the availability of personnel for training, Temporary Duty (TDY) costs, and any funding or resource constraints. The ACE I Report did not challenge course content, but the ACE II Study does. The lack of resources to do so was a primary reason why ACE I recommended a follow-on effort.

The foregoing discussion assumes that the number and content of the mandatory courses would remain essentially intact while concerted, cohesive, and well coordinated efforts throughout DoD were exerted to cope with the training challenge over a limited time period. Our study group determined that additional and concurrent efforts to enhance the learning value of the courses, restructure and reduce their variety and number could significantly reduce the training backlog as well as the recurring training requirement. This concurrent effort involves: 1) the application of competency-based instruction to all courses; 2) the reduction of the number of mandatory courses; 3) establishment of one mandatory course per experience level for each job function series; and 4) requiring attendance at the mandatory courses as soon as the individual becomes eligible.

This dual and concurrent approach will, if properly coordinated, overcome our training backlog within approximately 3 years without application of significant amounts of unprogrammed funds. Competency-based education and training and model curricula supporting this approach are discussed in Section IV.

Data as of August 1986

Is the Training Capacity Sufficient to Manage Annual Requirement or Training Requirement?

(1) Course Title	-Annual Requirement-			-Training Requirement-				
	(2) Annual Requirement	(3) Training Capacity	Capacity Sufficient?	(4) Annual Requirement (+)	(5) Immediate Backlog = Training Requirement	Training Capacity	Capacity Sufficient?	
Advanced Contract Administration	811	725	No	811	4007	4818	725	No
Advanced Management Course	45	120	Yes	45	387	432	120	No
Advanced Property Administration	94	100	Yes	94	602	696	100	No
*Business Management Course	0			0		0		
Contract Administration Course (Basic)	966	100	No	966	8260	9226	100	No
Defense Acquisition & Contracting Executive Seminar	308	960	Yes	308	2826	3134	960	No
Defense Contracts Management for Technical Personnel	276	2280	Yes	276	1197	1473	2280	Yes
Defense Contracts Negotiation Workshop	752	1950	Yes	752	4784	5536	1950	No
Defense Cost and Price Analysis	382	1440	Yes	382	1941	2323	1440	No
Defense Contract Property Disposition	10	240	Yes	10	114	124	240	Yes
*Defense Small Purchase Course	1130	0	Yes	1130	7763	8893	0	Yes
*Executive Center Seminars	45			45	387	432		
Executive Round Table	45	24	No	45	387	432	24	No
*Federal Executive Institute Program	45			45	387	432		
Financial Management in Weapon Systems Acquisition	15	144	Yes	15	127	142	144	Yes
*Quality & Reliability Four Week Course	276			276	1253	1529		
Government Contract Law	1704	930	No	1704	7792	9496	930	No
Introduction to Data Processing	10	408	Yes	10	118	128	408	Yes
Industrial Property Administration	10	150	Yes	10	90	100	150	Yes
Managerial Assessment Orientation Seminar	45	24	No	45	387	432	24	No
Management of Defense Acquisition Contracts (Advanced)	811	2840	Yes	811	4007	4818	2840	No
Management of Defense Acquisition Contracts (Basic)	981	2820	Yes	981	4727	5708	2820	No
Management Development Seminar	45	288	Yes	45	387	432	288	No
Management of Managers Course	45	240	Yes	45	387	432	240	No
Principles of Contract Pricing	382	336	No	382	1941	2323	336	No
Program Management Course	617	540	No	617	69	686	540	No
*Personnel Management for Executive Conference	45			45	387	432		
Production Management I	38	130	Yes	38	123	161	130	No
Production Management II	298	162	No	298	1681	1979	162	No
Quality Assurance Management I	1618	160	No	1618	11409	13027	160	No
Quality Assurance Management II	46	160	Yes	46	562	608	160	No
	11,895	17,271		11,895	68,489	80,384	17,271	

- (1) List of courses which apply to the training requirements of contracting, quality assurance and program management personnel as identified by DoDD 5000.XX and DoDD 5000.23.
- (2) The number of new hires per year who will require training.
- (3) The total number of students that can be trained in classrooms (resident or on-site) each year. Does not include correspondence mode figures.
- (4) The total number of personnel awaiting training.
- (5) The total number of personnel in a backlog status plus one year's annual requirement.

* Training capacities unknown. Defense Small Purchase Course has correspondence mode only. Business Management Course Discontinued FY87.

Data as of August 1986

Is the Training Capacity Sufficient to Resolve the Backlog and Annual Requirement in a Reasonable Time?

(1) Course Title	(2) Backlog	(3) Annual Requirement	(4) Training Capacity	Years To Resolve	Sufficient?
Advanced Contract Administration	4007	811	725	5+	No
Advanced Management Course	387	45	120	5+	No
Advanced Property Administration	602	94	100	5+	No
*Business Management Course		0			
Contract Administration Course (Basic)	8260	966	100	5+	No
Defense Acquisition & Contracting Executive Seminar	2826	308	960	5	No
Defense Contracts Management for Technical Personnel	1197	276	2280	1	Yes
Defense Contracts Negotiation Workshop	4784	752	1950	4	No
Defense Cost and Price Analysis	1941	382	1440	2	Yes
Defense Contract Property Disposition	114	10	240	1	Yes
*Defense Small Purchase Course	7763	1130	0		Yes
*Executive Center Seminars	387	45			
Executive Round Table	387	45	24	5+	No
*Federal Executive Institute Program	387	45			
Financial Management in Weapon Systems Acquisition	127	15	144	1	Yes
*Quality & Reliability Four Week Course	1253	276			
Government Contract Law	7792	1704	930	5+	No
Introduction to Data Processing	118	10	408	1	Yes
Industrial Property Administration	90	10	150	1	Yes
Managerial Assessment Orientation Seminar	387	45	24	5+	No
Management of Defense Acquisition Contracts (Advanced)	4007	811	2840	2	Yes
Management of Defense Acquisition Contracts (Basic)	4727	981	2820	3	Yes
Management Development Seminar	387	45	288	2	Yes
Management of Managers Course	387	45	240	2	Yes
Principles of Contract Pricing	1941	382	336	5+	No
Program Management Course	69	617	540	5+	No
*Personnel Management for Executive Conference	387	45			
Production Management I	123	38	130	2	Yes
Production Management II	1681	298	162	5+	No
Quality Assurance Management I	11409	1618	160	5+	No
Quality Assurance Management II	562	46	160	5	No

(1) List of courses which apply to the training requirements of contracting, quality assurance and program management personnel as identified by DoDD 5000.XX and DoDD 5000.23.

(2) The number of personnel awaiting training.

(3) The number of new hires each year who will require training.

(4) The total number of personnel that can be trained in classrooms (resident or on-site) each year. Does not include correspondence mode figures.

* Training capacities unknown. Defense Small Purchase Course has correspondence mode only. Business Management Course discontinued FY87.

Data as of August 1986

Backlog and Annual Requirement Distributed Over 1 to 5 Years

(1) Course Title	(2) Required Capacity Per Time Period					(3) Training Capacity
	1 Year	2 Years	3 Years	4 Years	5 Years	
Advanced Contract Administration	4818	2815	2147	1813	1612	725
Advanced Management Course	432	239	174	142	122	120
Advanced Property Administration	696	395	295	245	214	100
*Business Management Course	0	0	0	0	0	
Contract Administration Course (Basic)	9226	5096	3719	3031	2618	100
Defense Acquisition & Contracting Executive Seminar	3134	1721	1250	1015	873	960
Defense Contracts Management for Technical Personnel	1473	875	675	575	515	2280
Defense Contracts Negotiation Workshop	5536	3144	2347	1948	1709	1950
Defense Cost and Price Analysis	2323	1353	1029	867	770	1440
Defense Contract Property Disposition	124	67	48	39	33	240
*Defense Small Purchase Course	8893	5012	3718	3071	2683	0
*Executive Center Seminars	432	239	174	142	122	
Executive Round Table	432	239	174	142	122	24
*Federal Executive Institute Program	432	239	174	142	122	
Financial Management in Weapon Systems Acquisition	142	79	57	47	40	144
*Quality & Reliability Four Week Course	1529	903	694	589	527	
Government Contract Law	9496	5600	4301	3652	3262	930
Introduction to Data Processing	128	69	49	40	34	408
Industrial Property Administration	100	55	40	33	28	150
Managerial Assessment Orientation Seminar	432	239	174	142	122	24
Management of Defense Acquisition Contracts (Advanced)	4818	2815	2147	1813	1612	2840
Management of Defense Acquisition Contracts (Basic)	5708	3345	2557	2163	1926	2820
Management Development Seminar	432	239	174	142	122	288
Management of Managers Course	432	239	174	142	122	240
Principles of Contract Pricing	2323	1353	1029	867	770	336
Program Management Course	686	652	640	634	631	540
*Personnel Management for Executive Conference	432	239	174	142	122	
Production Management I	161	100	79	69	63	130
Production Management II	1979	1139	858	718	634	162
Quality Assurance Management I	13027	7323	5421	4470	3900	160
Quality Assurance Management II	608	327	233	187	158	160
	80,384	46,140	34,725	29,017	25,593	17,271

(1) List of courses which apply to the training requirements of contracting, quality assurance and program management personnel as identified by DoDD 5000.XX and DoDD 5000.23.

(2) The number of personnel who will need to complete training per year to resolve the backlog and accommodate each year's annual requirement.

(3) The total number of personnel that can be trained in classrooms (resident or on-site) each year. Does not include correspondence mode.

* Training capacities unknown. Defense Small Purchase Course has correspondence mode only. Business Management Course discontinued FY87.

Data as of August 1986

Recommended Options to Achieve Balance

(1) Course Title	(2) Annual Requirement	(3) Required Capacity	(4) Current Training Capacity	(5) Options	Remarks
Advanced Contract Administration	811	2147	725	1,2,3,4,6,9	
Advanced Management Course	45	174	120	2,3,4,6	
Advanced Property Administration	94	295	100	1,2,3,4,9	
*Business Management Course	0	0	-	-	Discontinued
Contract Administration Course (Basic)	966	3719	100	1,2,3,4,5,6,7,8,9	
Defense Acquisition & Contracting Executive Seminar	308	1250	960	3,4,9	
Defense Contracts Management for Technical Personnel	276	675	2280	-	Current Capacity Exceeds Required Capacity
Defense Contracts Negotiation Workshop	752	2347	1950	1,3,4,6	
Defense Cost and Price Analysis	382	1029	1440	-	Current Capacity Exceeds Required Capacity
Defense Contract Property Disposition	10	48	240	-	Current Capacity Exceeds Required Capacity
*Defense Small Purchase Course	1130	3718	0	-	Correspondence Mode Only
*Executive Center Seminars	45	174	-	2,3,4,6	
Executive Round Table	45	174	24	2,3,4,6	
*Federal Executive Institute Program	45	174	-	2,3,4,6	
Financial Management in Weapon Systems Acquisition	15	57	144	-	Current Capacity Exceeds Required Capacity
*Quality & Reliability Four Week Course	276	694	-	-	Course Not Yet Developed
Government Contract Law	1704	4301	930	1,3,4,6,8,9	
Introduction to Data Processing	10	49	408	-	Current Capacity Exceeds Required Capacity
Industrial Property Administration	10	40	150	-	Current Capacity Exceeds Required Capacity
Managerial Assessment Orientation Seminar	45	174	24	2,3,4,6	
Management of Defense Acquisition Contracts (Advanced)	811	2147	2840	-	Current Capacity Exceeds Required Capacity
Management of Defense Acquisition Contracts (Basic)	981	2557	2820	-	Current Capacity Exceeds Required Capacity
Management Development Seminar	45	174	288	-	Current Capacity Exceeds Required Capacity
Management of Managers Course	45	174	240	-	Current Capacity Exceeds Required Capacity
Principles of Contract Pricing	382	1029	336	1,2,3,4,6,9	
Program Management Course	617	640	540	3,4	
*Personnel Management for Executive Conference	45	174	-	2,3,4,6	
Production Management I	38	79	130	-	Current Capacity Exceeds Required Capacity
Production Management II	298	858	162	1,3,4,6,7,8,9	
Quality Assurance Management I	1618	5421	160	1,3,6,7,8,9	
Quality Assurance Management II	46	233	160	1,3,4	

- (1) List of courses which apply to the training requirements of contracting, quality assurance and program management personnel as identified by DoD 5000.XX and DoD 5000.23.
- (2) The total number of new hires per year who will require training.
- (3) The number of personnel who will need to complete training per year to resolve the backlog and to accommodate each year's annual requirement over a 3-year period.
- (4) The total number of students that can currently be trained in classrooms (resident or on-site) each year. Does not include correspondence mode figures.
- (5) Options: #1 Grant waivers. #2 Redistribute the training load to equivalents with excess capacity. #3 Identify equivalent courses outside the training base. #4 Increase current capacity without additional resources. #5 Rely on correspondence modes. #6 Offer additional classes #7 Develop additional correspondence modes. #8 Develop exportable training modes. #9 Use additional contract courses.

* Training capacities unknown. Defense Small Purchase Course has correspondence mode only. Business Management Course discontinued FY87.

SECTION IV

WHAT SHOULD BE TAUGHT IN THE MANDATORY ACQUISITION COURSES?

COMPETENCY-BASED INSTRUCTION IS EFFECTIVE AND EFFICIENT. IT STRIVES TO IMPART THE SPECIFIC SKILLS AND KNOWLEDGE NEEDED FOR INDIVIDUALS TO DO THEIR JOBS PROFESSIONALLY, IMMEDIATELY UPON COMPLETION OF TRAINING. TASKS TO BE TAUGHT IN A COMPETENCY-BASED MODEL CURRICULUM ARE PROPOSED FOR EACH ACQUISITION JOB FUNCTION. EACH MODEL CURRICULUM IS DESIGNED TO CONSOLIDATE ALL ESSENTIAL TRAINING AND EDUCATION INTO THE SHORTEST PRACTICAL TIME PERIOD. IMPLEMENTATION OF THE MODEL CURRICULA WILL INCREASE INSTRUCTIONAL EFFECTIVENESS, REDUCE BOTH TIME AWAY FROM THE JOB AND THE ASSOCIATED COSTS. COMPETENCY-BASED INSTRUCTION IN MANAGEMENT AND SUPERVISION WILL FURTHER ENHANCE THE PERFORMANCE OF ALL ACQUISITION FUNCTIONS. COMPETENCY-BASED INSTRUCTION, PROVIDED EARLY AND TO ALL PERSONNEL, WILL DEVELOP A HIGHLY EFFECTIVE AND EFFICIENT ACQUISITION WORK FORCE.

The proposed model curricula consist of only 13 mandatory functional courses. The courses include one entry and one intermediate level course in each of the

following functions: contracting, industrial property management, purchasing, industrial specialist, and quality assurance. No senior level functional training or education is mandated in these areas. In addition, one course in program management and one in business/financial management are proposed. All courses will be competency-based. A separate competency-based curriculum in management and supervision is also proposed for persons with supervisory and managerial assignments. The mandatory training is to be provided to all employees upon assignment to each level.

The benefits of the model structure are significant. Employees will receive essential, efficient training and education when they need it. They will be able to work effectively within a shorter period of time. The instruction will directly support high quality performance of seven acquisition functions. Furthermore, all employees will receive the necessary training. Time away from the job and instruction costs will be reduced. More efficient administration will result from requiring attendance at no more than one course at any level (one decision of supervisor to release, one travel order, and one training form). It is essential that supervisors recognize the long term benefits to their organization of timely, effective, and less costly training and education.

Implementation of the model curricula will require approximately 2 years. The expectation is that present programs of instruction will be redesigned to provide competency-based objectives, performance measures, and criterion testing; moreover new lesson plans and materials should be developed. Section V provides a qualitative evaluation of the existing acquisition training base.

Figure 1 compares the model curricula with current mandatory training and that to be promulgated in DoD Directives 5000.23 and 5000.48. Compared to the new requirements, the direct benefits of implementing the model mandatory curricula are:

- o Reduction in number of courses: 21
- o Annual reduction in number of students: approximately 450
- o Annual reduction in days away from job: approximately 22,000
- o Annual reduction in direct costs: approximately \$1.1M

ANNUAL MANDATORY FUNCTIONAL TRAINING TIME AND COST

<u>SOURCE OF REQUIREMENT</u>	<u>NUMBER OF MANDATORY COURSES¹</u>	<u>NUMBER OF STUDENTS PER YEAR²</u>	<u>WEIGHED AVERAGE COURSE LENGTH</u>	<u>STUDENT MAN-DAYS AWAY FROM JOB³</u>	<u>ANNUAL DIRECT COST⁴ (RESIDENT)⁵</u>
Current Directives	18	2,337	5.3 weeks	62,000	\$1.3M
DoD Directives 5000.23 and 5000.48	34	5,768	6.0 weeks	174,000	\$3.5M
Model Curricula	13	5,317	5.7 weeks	152,000	\$2.4M

¹Minimum mandatory for all persons in job function. Excludes courses required only for a speciality and generic management training. A particular course required for more than one function is counted more than once.

²Persons entering function and level with mandatory training requirement. Excludes present backlog.

³Working days. Excludes travel time and weekends away during courses.

⁴Includes per diem at \$42.00 and travel at \$290.00 per round trip. Excludes salaries, instructional costs, and administrative costs.

⁵Assumes 26.7 percent of students attend resident training, based on FY 85 graduates.

Section IV, Figure 1

The study group defined a "competency-based curriculum" as one which imparts to the trainee skills, knowledge, and abilities needed for performance of identified job tasks at a pre-defined level (i.e., meeting a specified standard of performance) under specified conditions. This definition was confirmed in discussions with occupational analysts at the U.S. Army Soldier Support Center (USASSC) and the U.S. Air Force Occupational Measurement Center (USAFOMC).

Competency-based instruction is effective and efficient because it is closely tied to the work to be performed. Trained individuals should be able to perform correctly each of their tasks and have a foundation to progress in their career field. Many current training programs increase general knowledge in a career field, but do not necessarily transfer skills for improved performance of specific tasks. Accordingly, the study group first identified the competencies and tasks for the acquisition job functions and then identified those to be taught in a competency-based model curriculum for each.

Draft task lists for acquisition job functions were compiled by the study group with substantial help of the Federal Acquisition Institute (FAI) and Service/Agency functional representatives. Suggestions on improving the task lists were solicited from the Defense Contracting/Acquisition Career Management Board (DC/ACMB), the Defense Quality and Reliability Assurance Career Management Board (DQRACMB), and faculty members at most of the schools providing DoD acquisition training.

One hundred eighty-four acquisition courses taught throughout DoD (including some courses taught for DoD activities by private contractors) were reviewed by the study group in its effort to determine appropriate competency/task content for the model mandatory courses. Extensive travel totaling 154 man-days was required of

study group members to conduct these reviews and perform data analysis at the Training and Performance Data Center, site of the ACE II data base. (Annex 2, Appendix J lists schools and other training sources included in this review.) We recognize that many other acquisition courses, some unique to a single Service or Agency, also are being taught at various locations. Some courses were not included in the review because they are designed to meet specialized needs. Others had not been identified to the study group. Some advanced degree programs in acquisition being conducted by the Services were also reviewed.

The ACE I Report provided the study group with its starting point for analyzing acquisition tasks and training by job functions and levels. However, we departed from ACE I conclusions and recommendations when we considered it appropriate. The most obvious departure from ACE I is in the identification of acquisition job functions. Where ACE I identified training and education requirements for fifteen different job functions, the ACE II analysis concludes that there are only seven discrete acquisition functions for which it is practical to identify mandatory formal training and education (see in Figure 2).

THE ACQUISITION JOB FUNCTIONS HAVE BEEN REFINED AND CONSOLIDATED

<u>ACE I REPORT IDENTIFIED THESE JOB FUNCTIONS. . .</u>	<u>. . . WHICH CORRESPOND TO THESE JOB FUNCTIONS IN THE MODEL CURRICULA</u>
Program Manager Deputy Program Manager	Program Management (Now also includes other key professionals in program management offices)
Business/Financial Manager	Business/Financial Manager
Contracting Officer Contract Negotiator Contract Specialist Contract Administrator Procurement Analyst Price and Cost Analyst	Contracting (1102 series and military equivalent)
Purchasing (1105 series and military equivalent)	Purchasing (1105 series and military equivalent)
Procurement Clerk/Assistant (1106 series and military equivalent)	Omitted. (Impractical to establish DoD-wide <u>mandatory</u> training requirements. Supervisors should send individual Procurement Assistants to Contracting courses on an as-needed basis.)
Industrial Property Management (1103 series and military equivalent)	Industrial Property Management (1103 series and military equivalent)
Industrial Specialist (1150 series and military equivalent)	Industrial Specialist (1150 series and military equivalent)
Quality Assurance (1910 series and military equivalent)	Quality Assurance (1910 series and military equivalent)

Section IV, Figure 2.

Lists of competencies and tasks performed in each of these job functions, together with a model mandatory curriculum for each, are presented in Annex 2 to this report. An eighth curriculum applies to supervisors and managers in all acquisition job functions.

<u>JOB FUNCTION</u>	<u>ANNEX 2, APPENDIX</u>
Program Management (Includes Program Manager, Deputy Program Manager, and other key professionals working in a program management office.)	A-1 & A-2
Business/Financial Manager	B-1 & B-2
Contracting (1102 series) (Includes Contracting Officer, Contract Negotiator, Contract Specialist, Contract Administrator, Procurement Analyst, Price and Cost Analyst)	C-1 & C-2
Industrial Property Management	D-1 & D-2
Purchasing (1105 series)	E-1 & E-2
Industrial Specialist	F-1 & F-2
Quality Assurance	G-1 & G-2
Supervision and Management	H-1 & H-2

Figure 3 summarizes the model curricula and compares them with current requirements and those expected to be promulgated.

**COMPARISON OF CURRENT, ACE I, AND ACE II
MANDATORY TRAINING**

<u>JOB FUNCTION</u>	<u>LEVEL</u>	<u>CURRENT JOB REQUIREMENT</u>	<u>ACE I REQUIREMENTS^{1/}</u>	<u>ACE II PROPOSED REQUIREMENTS^{2/}</u>
Program Management (Several GS/GM Occupational Series and Military Equiv.)	I	N/A	N/A	1 Course 4-6 weeks (Mandatory for key professionals in Program Management Offices)
	II	N/A	N/A	Same as Level I
	III	N/A	N/A	1 Course 10-14 weeks (Only mandatory for Program Managers and Deputy PMs)
	IV	N/A	1 Course 20 weeks (Only mandatory for PMs of major programs)	No Additional
Business/Financial Management (Several GS/GM Occupational Series and Military Equiv.)	I	N/A	N/A	N/A
	II	N/A	3 Courses 9 weeks	1 Course 2-4 weeks
	III	N/A	No Additional	No Additional
Contracting (Series 1102 and Military Equiv.)	I	3 Courses 8 weeks	5 Courses 11 weeks	1 Course 6-8 weeks
	II	2-3 Courses 5-9 weeks (Depends on Specialty)	2-5 Courses 5-13 weeks (Depends on Specialty)	1 Course 6-8 weeks
	III	1 Course 1 week	1 Course 1 week	No Additional
Property Managemnt (Series 1103 and Military Equiv.)	I	3 Courses 8 weeks	4 Courses 8 weeks	1 Course 3-4 weeks
	II	2 Courses 4 weeks	2 Courses 3 weeks	1 Course 2-3 weeks
	III	1 Course 1 week	1 Course 1 week	No Additional

^{1/} Forthcoming under revised DoDD 5000.23 and new DoDD 5000.48

^{2/} Model mandatory curricula contained in this report

**COMPARISON OF CURRENT, ACE I, AND ACE II
MANDATORY TRAINING (Continued)**

<u>JOB FUNCTION</u>	<u>LEVEL</u>	<u>CURRENT JOB REQUIREMENT</u>	<u>ACE I REQUIREMENTS^{1/}</u>	<u>ACE II PROPOSED REQUIREMENTS^{2/}</u>
Purchasing (Series 1105 and Military Equiv.)	I	N/A	2 Courses 5 weeks	1 Course 4-6 weeks
	II	N/A	2 Courses 5 weeks	1 Course 4-6 weeks
	III	N/A	No Additional	No Additional
Procurement Clerk/ Assistant (Series 1106 and Military Equiv.)	I	N/A	N/A	N/A
	II	N/A	2 Courses 5 weeks	N/A
	III	N/A	No Additional	N/A
Industrial Specialist (Series 1150 and Military Equiv.)	I	2 Courses 10 weeks	2 Courses 10 weeks	1 Course 6-8 weeks
	II	2 Courses 5 weeks	2 Courses 5 weeks	1 Course 3-4 weeks
	III	1 Course 1 week	1 Course 1 week	No Additional
Quality Assurance (Series 1910 and Military Equiv.)	I	N/A	2 Courses 5 weeks	1 Course 4-6 weeks
	II	2 Courses 5 weeks	2 Courses 5 weeks	1 Course 3-4 weeks
	III	N/A	1 Course 1 week	No Additional
Supervisory and Managerial Training (Training for Supervisors and Managers in all functions)	Supervisor			1 Course 3-5 weeks
	Manager			1 Course 3-5 weeks
	Executive	1 Course 2 weeks (Series 1102, 1103, and 1150 Only)	1 Course 2 weeks (Series 1102, 1103, 1150, and 1910 Only)	1 Course 2-3 weeks

^{1/}Forthcoming under revised DoDD 5000.23 and new DoDD 5000.48

^{2/}Model mandatory curricula contained in this report

The task lists in the Annex 2 appendices describe work performed in each job function. The model curricula constitute the study group's recommendations on which competencies and tasks should be formally taught in mandatory courses for each of these job functions and for each level of supervision and management. They are recommended for both civilian and military members of the DoD acquisition work force. The model curriculum for each job function organizes the competencies and tasks into mandatory courses according to the career level (e.g., entry, intermediate) at which they should be taught. In some cases, a task is recommended to be taught at more than one career level. Decisions about which tasks should be included at which career levels were based primarily on ratings of training emphasis obtained from course directors and instructors of acquisition courses for DoD personnel. The estimated length of each model course is given, based largely on the judgments of study group members with knowledge of the lengths of existing courses and adjusted for elimination of unnecessary duplication and increased emphasis on teaching skills. As an example of unnecessary course content duplication of effort, a review was made by comparing the 1102 contracting competencies and tasks contained in two existing mandatory courses that all entry contracting personnel are required to attend. It was determined that approximately 40 percent of the tasks taught were contained in both mandatory courses.

How the task list and model curriculum for each job function were developed is described in detail in the Annex 2, Appendices A through G and Appendix K (Methodology).

Tasks to be taught in a competency-based model curriculum in supervision and management (Annex 2, Appendix H) were developed and extensively validated by the Army Management Engineering Training Activity (AMETA). The study group was not

tasked to develop competency-based managerial and supervisory instruction, but recognizes its importance to complement functional training and education for the acquisition community. The AMETA is presently using the model to restructure current courses into a total coherent management and supervisory curriculum for the Army. The study group recommends that the Defense University of Acquisition Management request that AMETA develop a competency-based curriculum in generic management and supervision which can be utilized by all acquisition functions throughout the Department of Defense.

A special review was made of AMETA management courses in relation to the program management task list, which contains many general management tasks. The purpose was to determine the extent of duplication between generic management training and program management training. The group found that the present AMETA-conducted management courses provide a useful introduction to program management tasks but do not specifically address the program management environment. In addition, AMETA management competencies were correlated with program management tasks. Significant relationships were found. Further analysis might lead to better training. Annex 2, Appendix H contains further information on this review.

In designing the model curriculum for each job function, the study group sought to keep the number of mandatory courses to a minimum. Usually no more than one mandatory course is required of an individual at any given career level. The estimated length of each model course has been kept as short as practicable, with the net result that the model curricula, for most job functions, will provide better training and education in less total time than existing required courses. The overall time saving results from 1) elimination, through course consolidation, of unnecessary overlap and duplication and excess "administrative time" in the classroom; and 2) elimination of

formal training on tasks which can more appropriately be learned on-the-job or in non-mandatory training. Our goal has been to include in the mandatory courses instruction on all the essential tasks commonly performed in the job function. Currently, in most job functions, an individual must attend several courses at a given career level to get training and education of such complete scope, if indeed it is available at all.

As they are fully developed and implemented, the competency-based model courses would replace existing mandatory courses. The study group recommends that DoD require that mandatory courses be completed within 6 months of initial assignment to the entry level, and within a year of assignment to the intermediate level (unless the individual has been granted a waiver or has passed an equivalency test). Despite this emphasis on training and education soon after assignment to a career level, we recognize it may be neither practical from a workload standpoint nor fully desirable from a learning standpoint for the individual to attend mandatory training immediately upon assignment. The goal should be to allow the individual to become familiar with his or her new organization and new duties for 1-3 months before attending a mandatory course.

We recognize there are difficulties with the "one course per career level" approach from the perspective of the individual's supervisor. It is difficult enough to release an employee anytime to attend a training course for an extended period (typically about 5 weeks under the model curricula); it may be particularly difficult during the first 6-12 months of a new assignment. However, we believe the benefits of our approach to line supervision will greatly outweigh the disadvantages. One benefit is that, in most cases, the individual at a particular career level will have to be released for mandatory training only once -- not several times as is presently the case -- so there will be fewer scheduling difficulties overall. Second, the total amount of

time away from the job for mandatory training will be reduced in most instances. Third, the individual will return from the mandatory course well-trained, with the skills and knowledge to actually perform proficiently all the essential tasks of his or her job, early in the assignment.

Although the study group considers the task lists and model curricula to be the best available at this time, they are preliminary. Their content and validity may be significantly improved on the basis of information from surveys of supervisors and program management personnel in the acquisition job functions. As supervisors in the field are the real "customers" for well trained members of the acquisition work force, their views on training and education should weigh heavily in the design of a model curriculum. With the assistance of the U.S. Air Force Occupational Measurement Center and Service/Agency functional representatives, surveys of supervisors in four job functions -- contracting, quality assurance, property management, and industrial specialist -- were conducted by the study group, but results were not available in time to include in this report. (Survey results are expected to be available in March 1987.) The study group urges that the task lists and model curricula be reviewed and refined as necessary by groups of functional experts in light of the results of these surveys. Moreover, because acquisition job tasks are not static, the task lists and the model curricula need to be periodically reviewed and updated if the model training program is to remain an appropriate basis for course development or revision.

When further refined on the basis of the survey data, the model curricula will provide a starting point for detailed development of model mandatory courses. The present mandatory curricula for the contracting and program management job functions should be replaced by new courses based upon the model curricula.

Mandatory training requirements should be established for the following job functions for which mandatory courses do not now exist:

- o Quality Assurance
- o Industrial Specialist
- o Property Management
- o Business/Financial Manager

On-the-job training or specialized training beyond the mandatory requirements are not addressed in the model curricula except by implication; i.e., where certain tasks appear on the task lists but do not appear, or have low priority, in the model mandatory curricula. The study group concludes that employees can most appropriately learn such tasks on-the-job or through attendance at specialized courses outside the mandatory curricula.

The FAI has made considerable progress in developing training "blueprints" based on its competency/task list for the contracting job function. These blueprints include conditions, standards, and criterion tests for task performance, and underlying knowledge and skills required. The FAI task list has been generally validated in DoD by the work of the study group; therefore the study group concludes that FAI blueprints should be considered in the development of DoD courses based on the model curriculum for contracting, and recommends that FAI participation be requested.

The data base on existing acquisition courses compiled by the study group (described in Annex 2, Appendix I) should serve as an excellent source of information to the developers of the model courses in each job function.

Present courses generally are not organized to teach tasks, but to provide overviews. The study group concludes that more task-oriented training could significantly increase training effectiveness, particularly at the entry and intermediate levels. There is a specific need for (a) overview instruction at the entry level covering the entire acquisition process, to give entry level personnel the "big picture" of how various job functions interrelate, and for (b) training and education at the intermediate level designed to help experienced individuals in each job function integrate their work with other acquisition functions. This knowledge of functional integration is an underlying basis for many of the tasks taught, and should be incorporated into all functional course development.

The study group received numerous comments about the importance of teaching ethics in acquisition training. Ethics is necessary for many of the tasks taught, and should be embedded into all functional course development.

Some existing courses are designed for personnel of only one Service. These courses concern (in addition to DoD policy and requirements) terminology, policy, procedures, and organizational information specific to the sponsoring Service. The faculty members teaching these courses believe that the inclusion of such service-specific content improves the ability of trainees to perform certain job tasks at the worksite after the training. They believe that, for some tasks, it would be far less efficient to teach service-specific content for every service in a course designed for a multiservice audience. Some other courses contain little or no service-specific content because the tasks taught do not require it. The data developed by the study group do not provide information about which tasks can most efficiently and effectively be taught to a single service group. The degree to which the teaching of individual tasks requires service-specific content should be addressed during detailed

course development. Course developers should consider whether particular tasks can be taught most efficiently and effectively on a DoD-wide basis or by each service.

Competency-based classroom training starts the process of skill development but subsequent practice and reinforcement on the job are necessary for full proficiency. Further, a number of tasks in each job function (i.e., many of those appearing on the task lists but not in the model curricula) can be learned more appropriately on-the-job than in classroom training. The OSD should develop effective guidance for supervisors on conducting on-the-job training (OJT), or assure that such guidance is provided by each DoD component. The OSD should initiate development of OJT plans to complement and reinforce mandatory formal instruction, or refine existing OJT plans as necessary. In addition, development of a handbook or other appropriate job performance aids for each job function should be considered.

The study group believes that the training courses called for in the model curricula can and should be fully developed and implemented within 2 years. To meet such a schedule would, of course, require that sufficient priority and well-coordinated, intensive effort be focused on the project. Such an effort is worth undertaking for several reasons. First, any substantial improvement in the quality of instruction for the acquisition work force can be expected to result in significant tangible (albeit difficult to quantify) improvements in the efficiency and effectiveness of the acquisition function, with consequent savings to DoD. Second, and perhaps of even greater significance, implementing the model curricula can help reduce the training backlog, with similar benefits. For example, if the one model course for the entry level of the contracting function were fully developed and available today, it would be possible to provide all essential instruction to an individual entering the contracting function by sending him or her to that one course of 6-8 weeks in length, in contrast to

the ACE I requirement for five courses totalling 11 weeks. The savings in resources (trainee's time away from the job, travel and per diem, instructional resources, and training administration) resulting from implementation of the model curriculum could then be applied to training more individuals in a given time.

SECTION V

ANALYSIS OF ACQUISITION TRAINING

A QUALITATIVE EVALUATION OF THE ACQUISITION TRAINING BASE WAS CONDUCTED AND FOUND THAT TO PROVIDE COMPETENCY-BASED INSTRUCTION MANY ACQUISITION COURSES MUST BE REVISED TO INCLUDE: 1) CLEAR, MEASURABLE LEARNING GOALS AND OBJECTIVES; 2) PERFORMANCE MEASURES APPROPRIATE TO THESE OBJECTIVES; AND 3) GRADUATION BASED ON CRITERION PERFORMANCE. TO IMPROVE THE EFFECTIVENESS AND EFFICIENCY OF THE ACQUISITION TRAINING BASE, A COORDINATING, CONTROLLING, AND MANAGEMENT MECHANISM FOR THE MANDATORY COURSES SHOULD BE ESTABLISHED.

SPECIFIC INSTRUCTIONAL MANAGEMENT ISSUES ADDRESSED BY THE STUDY GROUP INCLUDE:

- ESTABLISHMENT OF SYSTEMATIC PROCEDURES FOR DEVELOPING AND REVISING COMPETENCY-BASED COURSES

- ADHERENCE TO COURSE PREREQUISITES

- THE IMPLEMENTATION OF QUALITY ASSURANCE

○ THE UTILIZATION OF INNOVATIVE TECHNIQUES TO EXPORT TRAINING

○ THE GRANTING OF EQUIVALENCY FOR APPROPRIATE COURSEWORK AND/OR JOB EXPERIENCE

○ THE DESIGN OF AN ACQUISITION TRAINING MANAGEMENT DATA BASE

○ THE DUPLICATION OF EFFORT BETWEEN SCHOOLS AND COURSES.

The qualitative assessment of the acquisition training base was designed to:

○ Assess the capability of the training base to provide competency-based learning

○ Identify voids and duplications in meeting the required competencies

○ Recommend measures to ensure a balanced competency-based acquisition training program

○ Identify promising and innovative training technologies

○ Propose a quality assurance system to maintain and improve the training base

○ Investigate academic accreditation policies and procedures

○ Assess the process and procedures for granting equivalency in lieu of course attendance

○ Identify data base requirements to manage acquisition training.

Data for these assessments were obtained from course documentation; interviews with course directors, developers, and instructors; classroom observations; and information gathered from the schools. In addition, there was a literature search, and review of appropriate Government policy and regulations.

Competency is defined as "those observable, measurable behaviors which demonstrate the ability to perform in a manner that enables one to accomplish a job related task to a pre-defined level." The analysis provided information on the capability of the training base to provide competency-based learning; methods and depth of instruction; and information on course content which included voids and duplications.

A model was developed to compare existing courses. It was based on an operational definition of competency derived from literature and instructional systems design/development philosophies. Course elements such as behavioral objectives and performance measures were compared to elements which would be expected in an "ideal" course. (See Annex 3, Appendices B, C, and E.) The results of this analysis indicated that all of the acquisition courses fell short of the "ideal" for competency-based training. Summary ratings are shown in Table V-1. For detailed data, see Annex 3, Appendix D, pages 6-7 and 6-8.

ALL SCHOOLS FALL SHORT OF THE IDEAL
FOR COMPETENCY-BASED TRAINING

<u>Average Score*</u>	<u>School</u>	<u>Number Courses</u>
BASIC		
65.43	Lowry	9
64.20	AFIT	5
43.83	ALMC	4
42.90	AMETA	4
40.70	Brooks	1
30.86	ASN	3
INTERMEDIATE		
59.47	AFIT	6
48.13	ALMC	3
46.90	AMETA	2
34.60	Lowry	1
ADVANCED		
43.20	ASN	1
42.00	DSMC	1
40.70	AMETA	1
30.90	ALMC	1

*100 is the maximum score

Table V-1

The Lowry courses consistently scored high on all assessments, followed by those courses taught by AFIT. The major factor attributable to these courses being closest to the "ideal" was lesson objective statement's quality which include behavior, conditions, and standards. The mismatch of performance measures to intended learning outcomes was the most apparent flaw in the design and conduct of those courses which did not score well. (These courses might be competency-based; however, direct classroom observation is required to make this determination.)

It was also apparent from the data that entry level or basic courses were more competency-based than the intermediate courses; which, in turn, were more competency-based than the advanced courses. Of the 42 courses evaluated, 10 were judged to have a high competency potential. Twenty-four had a moderate competency potential, and eight had a low competency potential.

The content analysis determined that 89.9 percent (1039 of the 1156) of the total tasks included in all job functions were addressed to some extent within the individual courses. Areas of duplication were also identified.

In addition to the quantifiable data, there were a number of factors which were observed which were not subject to measurement. These factors are described since they have a direct impact on the quality of instruction.

INSTRUCTORS - Several schools reported a shortage of qualified instructors. It was generally agreed that technically based subject matter is best taught by a specialist in his or her technical field, rather than a person who must learn the subject matter and does not have job experience. The ratio of years of subject matter experience to instructor experience has declined from 15 to 10 to approximately 5 to 1. This is primarily due to the loss of retired military who have dropped out of the field due to the Dual Compensation Act.

Morale was good in some instances and poor in others. Personnel complained of inequities in pay, long hours, insufficient and poor quality staff, and inadequate facilities. A need for more instructor training was also indicated. Some schools have requirements for formal instructor training, while others have the prospective instructor audit the course prior to instructing it.

STUDENTS - The student mix is diverse. Instructors report that there is loose adherence to course prerequisites. Students are taking courses for which they are not qualified. Reasons include enrolling too early in their career, or not having the background or skills necessary to master the curriculum. This affects both the quality of instruction and student/instructor morale.

COURSE REVISION - Many acquisition courses require constant updating. There appears to be no one method for maintaining currency of information that is both accurate and timely. While some schools revise courses on a regular schedule, often individual instructors must initiate the research and revision process. This is not necessarily bad, but instructors with a full teaching load find it difficult to maintain their course's currency. Likewise, adherence to strict update schedules can mean that the curriculum update does not occur at an appropriate time.

The capability of the training system to provide cost/effective competency-based acquisition training is dependent on a number of factors. These include course structure; physical training environment; responsiveness of course managers, developers, and proponents; availability of training aids and optional learning strategies; instructor qualifications and knowledge of subject matter; student qualifications and characteristics; feedback to the instructional system from the user; the dynamic and constantly changing nature of the courses and timeliness of information for updating courses. The data indicated considerable variability in the above areas across schools and course. A number of issues have surfaced during the study. They include:

- o There is a lack of understanding of course development according to a systematic engineering methodology.
- o Funding is not sufficient to provide for innovative training aids.

- o There is difficulty obtaining qualified students and instructors.
- o A timely feedback system is needed due to the dynamic nature of the acquisition process and changes in the legal, technical, and regulatory environment.
- o The complexity of the acquisition process (the FAR, DAR, and service specific supplements).
- o Users do not place sufficient emphasis on formal training.
- o The system is not capable of providing training to the "right" personnel in sufficient numbers.
- o Course developers are unable to respond quickly in making curriculum changes.
- o Some course developers have failed to closely match curriculum to the depth required to perform competently on the job.
- o Acquisition courses are often co-located with military technical courses which are generally subject to different requirements.

As a result of this analysis, courses need to be reviewed and revised based on the "ideal" model for competency-based training. Tasks would assure that:

- o Systematic procedures are used for competency-based course development and revision.
- o Learning goals and objectives are accurate, clearly defined, and measurable.
- o Appropriate student performance measures are developed for each objective.
- o Appropriate teaching methodologies are used for the information being taught, and the level of learning needed by the students.
- o Graduation is based on criterion performance.

- o Appropriate course prerequisites are established and adhered to.
- o Control systems need to be developed to maintain quality and assure this process is standardized for all courses in the acquisition training base.

Delivery systems are described in Annex 3, Appendix A-1, pages V-I-42 through V-I-51 and methods/media/selection are described in Annex 3, Appendix A-1, pages V-II-31 through V-II-36.

Accreditation is regarded as the stamp of approval given to a program or institution by a certifying agency. If that certifying agency is competent and bases its accreditation on an appropriate evaluation, the process is meaningful and useful to the program or the institution. Additionally, the process allows the institution to analyze and appraise its own functions qualitatively rather than quantitatively, in terms of its own unique goals and objectives. It is one method of achieving quality in an educational institution. The granting of accreditation indicates that an institution or program meets or exceeds a certain level of educational quality.

To gain accreditation, a series of steps must be followed. Self-study, the first step, is the most involved and comprehensive. It requires time (at least a full academic year), careful planning, and involvement from the faculty and administration.

An internal DoD accreditation system should be developed to evaluate or standardize the quality of courses, facilities, procedures, and assure instructors and faculty achieve appropriate teaching skill competency levels. In addition, outside accreditation should be pursued by all schools to enable graduates to gain credit for a degree.

The granting of equivalency for appropriate course work, self-study, or job experience may help relieve the training base backlog, reduce the resources required, and enable employees to spend more time on the job. The three primary methods for granting equivalency are examination, transfer of credit, and assessment of on-the-job or self-directed training.

Construction and design of examinations require a clear understanding of the course objectives, performance criterion, and intended learning outcomes. The undertaking of a program of credit by examination requires strong commitment to providing educational opportunities outside of the classroom, assuring that examinees possess the same level of competence as course graduates, and that the costs of such a program do not exceed the benefits.

Transfer of credit is closely aligned with the accreditation process. A major flaw inherent in most transfer policies is that the transferred credits only show that a student has been exposed to the certain body of knowledge, and that they have achieved a letter grade. The credits do not reflect what the student has learned.

Self-directed or on-the-job training usually takes place outside of the sponsorship of educational institutions. Guidelines have been developed by the Council for Advancement of Experiential Learning which require reliable and valid evaluation of the student's achievement, applicability of the learning to the student's course of study, qualified faculty or examinations for evaluation of the learning, and clearly stated institutional policies related to the assessment of such credit.

As competency-based training becomes a reality, it should be easier to establish the procedures and means for evaluating equivalency.

An automated management and information system is needed to:

- 1) Account for and control resources
- 2) Manage the pipeline of large number of personnel in various career paths
- 3) Provide information on student and instructor performance
- 4) Provide decision makers information on the quality of personnel and other personnel factors
- 5) Alert decision makers to potential problems in the system
- 6) Provide a reporting system for control of training curriculum revision and updating
- 7) Maintain and disburse changes in policy, laws and regulations which impact training
- 8) Schedule student training, and provide fiscal costs and projections. A detailed system will be developed as part of the implementation plan for the University.

SECTION VI

DEFENSE UNIVERSITY OF ACQUISITION MANAGEMENT

ACQUISITION TRAINING FOR CONTRACTING, QUALITY ASSURANCE, AND PROGRAM MANAGEMENT LACKS THE NECESSARY DIRECTION, PLANNING, COORDINATION, AND ACCOUNTABILITY TO MAKE THE TRAINING BASE EFFICIENT AND EFFECTIVE. REAL AND PERCEIVED PROBLEMS CONTINUE TO MOUNT -- LARGE TRAINING BACKLOGS, INADEQUATE RESOURCES, UNNECESSARY DUPLICATION, COURSES WITH NO OR LIMITED COMPETENCY AND SKILL DEVELOPMENT, AND TRAINING TECHNOLOGIES AND CAPABILITIES NOT FULLY EXPLOITED OR PROMOTED. THE UNIVERSITY WILL SERVE AS THE CATALYST, PROVIDING DIRECTION, COORDINATION, AND GUIDANCE FOR ENHANCING THE PROFESSIONALISM OF THE ACQUISITION WORK FORCE.

A. INTRODUCTION

A strong and viable training and educational program is fundamental to strengthening the DoD's acquisition process. However, a viable training program must have the capability to be effective throughout DoD. Such a program demands judicious application of the philosophy of centralized direction and decentralized execution. The establishment of a Defense University of Acquisition Management (DUAM) will

help provide acquisition training excellence throughout DoD and provide the basis for the education of acquisition personnel as required by the FY87 DoD authorization bill.

B. CURRENT ARRANGEMENT AND DIRECTIVES

Training and education for that portion of the acquisition work force with which the study is concerned is provided by five service schools, a contractor, and the Defense Systems Management College. Each Service has been designated as an executive agent for the development and conduct of specific DoD-common acquisition courses by the Defense Management Education and Training (DMET) Board. Service schools, other than the executive agent's schools, may conduct courses with DMET Board approval. Mandatory courses conducted by these schools are their presentations of the executive agent's courses. Two manuals and three directives provide the training and education policy and guidance.

1. DoD Manual 1430.10-M-1, DoD Civilian Career Program for Contracting and Acquisition Personnel, prescribes the minimum skill level and knowledge to be attained by procurement personnel through mandatory courses, passing an equivalent test or demonstrating requisite skills and knowledge through qualifying experience.

2. DoD Manual 1430.10-M-2, DoD Civilian Career Program for Quality and Reliability Assurance Personnel, describes career progression in the quality and reliability assurance career field and lists the desirable training courses.

3. DoD Directive 5000.23, Systems Acquisition Management Careers, establishes eligibility criteria and policy for the selection, training, career development, and tenure of DoD program management personnel.

4. DoD Directive 5000.48, Experience, Education and Training Requirements for Personnel Assigned to Acquisition, establishes experience, education and training requirements for military and civilian personnel assigned to contracting, quality assurance, and business and financial management positions in DoD.

5. DoD Directive 5010.16, Procedures for the Administration of the Defense Management Education and Training Program, outlines procedures, responsibilities, and administration of the defense management acquisition courses.

C. CURRENT PROBLEMS AND THE DUAM SOLUTION

There are many perceived and real problems that affect the efficiency of the DoD training base for contracting, quality assurance, and program management. The study group examined a broad range of alternatives to establishing an effective coordinating entity capable of coping with the problems and determined that a Defense University of Acquisition Management can best provide the needed infrastructure. Our conclusion is derived from the following discussion.

PROBLEM 1. Virtually no capability exists to determine the size, composition, trends, and training requirements of the work force. Current data base systems--both civilian and military--are unable to provide personnel and training information on the work force by job function and level (see Section II). Without such data, the training requirements cannot be readily identified or forecast.

DUAM APPROACH. The University, in conjunction with the Services and DoD Agencies, would monitor the size and composition of the work force and related training requirements. Through trend analysis, the University would forecast the out-year training requirements for budgeting purposes. The University would maintain a data base that would reliably support the validation of the training requirements.

PROBLEM 2. Virtually no capability exists to influence the training offered by the training base to reflect DoD philosophy or interest. There is no full time focal point to coordinate DoD interests with efforts undertaken by the Service schools. Currently, three boards--DCACMB, DQRACMB, and DMET--share responsibility to provide general guidance without specific, continuous authority for the training and education programs.

DUAM APPROACH. A single administrator--the University President--would provide the policy direction needed to ensure that the training and education provided reflect DoD philosophy and interests. The DUAM would consult with the Services, Agencies, and appropriate boards in the formulation and promulgation of such philosophy and policy.

PROBLEM 3. There is virtually no capability to apply uniform standards for substituting testing for attendance at the mandatory courses.

DUAM APPROACH. Equivalency tests are effective measurement devices to gauge the knowledge base of the work-force personnel. The University would develop DoD-wide equivalency tests, conduct appropriate analyses to ensure their validity, and develop uniform standards for their administration.

PROBLEM 4. Limited capability exists to ensure harmonization of the courses and facilities among the centers of learning. Presently, there is no institutionalized process available among the schools to facilitate personal contact and review of curricula, related instructional methods and materials. There is virtually no crossfeed among the schools regarding their respective capabilities and services.

DUAM APPROACH. Under the direction of DUAM, a Curriculum Advisory Council, composed of representatives from the Service schools, would be created. Its primary purpose would be to provide a forum to exchange ideas and review the courses for contracting, quality assurance, and program management. This Council, as an advisory body to the University, would ensure that there is no unnecessary duplication of courses and that training technology and research efforts and results are shared.

PROBLEM 5. Virtually no capability exists to cope with unusual training requirements that cross service lines. The current problem of overcoming the training backlog is an example of an effort that requires a DoD-wide approach.

DUAM APPROACH. The DUAM would have the capability to expeditiously coordinate and manage the development and/or revision of the mandatory courses and ensure that all unusual or special training requirements common throughout DoD are quickly addressed and satisfied.

PROBLEM 6. Limited capability exists to accredit schools, courses, instructors, or students in any cohesive fashion. Accreditation and certification procedures vary widely from school to school. There is no systematic process to certify courses, instructors, or students--methods vary. Some schools require attendance at a formal instructor course, while others do not. Faculty development programs vary widely in scope and objectives. Some schools actively pursue new instructional techniques and methods; others do not. As a result, instructional excellence is not always achieved.

DUAM APPROACH. The University would serve as the certification agency for all mandatory courses, faculty, and student achievement of the required competencies. The DUAM would seek appropriate accreditation for its courses.

PROBLEM 7. The capabilities of the Federal Acquisition Institute (FAI) generally are not known or exploited. Since 1979, FAI has identified through a comprehensive survey, the job tasks and competencies for the 1102 and 1105 civilian job series. Such task listings and competencies have significant implications for curriculum content. Yet, the Service schools are either unaware of or did not make use of FAI's work.

DUAM APPROACH. The University would develop a close interface with the Federal Acquisition Institute, ensuring that task listings and competencies developed for specific job functions are integrated into each applicable course curriculum.

PROBLEM 8. Expertise in one center of learning is not readily transported to others. There is little sharing of faculty expertise in subject knowledge, curriculum design, and standards and evaluation techniques. A shared guest-lecture program or sharing of faculty members is almost non-existent.

DUAM APPROACH. The University would serve as the "honest broker" to foster the exchange of expertise among its members. It would sponsor and sustain a guest lecture program among them.

PROBLEM 9. Training generally does support some of the skills (competencies) required for appropriate job performance and level. However, the study group found that the majority of courses were primarily information and knowledge oriented with limited skills practiced or provided for job application.

DUAM APPROACH. The University would provide competency-based learning, ensuring that basic knowledge and job prerequisite skills are provided so that each student would be more capable of job performance after course completion.

PROBLEM 10. There is unnecessary duplication of courses. This duplication results in unnecessary expenditure of resources.

DUAM APPROACH. Avoiding unnecessary duplication of courses would be a prime activity of the University during its conduct of normal business. It would, initially, be limited to the mandatory courses.

PROBLEM 11. Non-traditional training methods are not vigorously pursued.

DUAM APPROACH. The University would foster and judiciously encourage the application of selected training techniques and provide a forum for the exchange of information regarding results attained.

PROBLEM 12. Currently, there exists no reliable basis to ensure funding for training. The acquisition community must compete for the limited training resources with other functional areas which historically have had higher priority. No one speaks with a sufficiently powerful voice for this segment of the work force. The result is an unacceptably low level of funding of mandatory training.

DUAM APPROACH. The Services and DoD Agencies on an annual basis would submit to the University their annual training requirements and a 5-year projection for each mandatory course. Funding (student per diem and travel only) requirements would be submitted at the same time. Based on these inputs, the University would

develop and submit to the U.S. Army the annual budget and POM to include student per diem and travel. The U.S. Army will serve as executive agent for the University. Once the budget is approved, the University would provide to the Services and Agencies the quotas and associated funds to support their requirements.

PROBLEM 13. No capability exists to ensure maximum use of available quotas. A course offering at one school may be oversubscribed while a similar offering at another school may be undersubscribed. Few incentives induce personnel to attend courses; no-shows are common; supervisors frequently do not release subordinates for training. Some schools maintain an alternate list in the event of a last minute cancellation. Other schools do nothing--no alternate list or overbooking.

DUAM APPROACH. Based on individual service and DoD agency requirements, as well as OSD-directed training objectives, the University would issue each a block of quotas annually. The Services and DoD Agencies would administer the quotas and ensure that every requested quota is filled by a qualified student. Services and Agencies would provide no-show data on a quarterly basis to the University.

D. IMPLEMENTATION OF THE UNIVERSITY CONCEPT

Implementation of this approach would be formalized with the publication of DoDD 5160.XX attached. This directive would establish the University in the form of a consortium of selected DoD colleges, schools and education centers and have, as an option, its development to a consolidated University. Implicit in this directive is the requirement for the planning and programming actions necessary to evolve from the consortium to the consolidated version of the University. Additionally, applicable DoD manuals and directives will require revision (see Annex 4, Appendices B through F).

1. PHASE I-THE CONSORTIUM

a) CONCEPT

1) The University would consist of selected DoD colleges, schools and training centers nationwide, each of which would be an associate member. The authority of the University would be exercised initially only in those curriculum areas relevant to mandatory acquisition training and education. The University President, at the direction of the Under Secretary of Defense for Acquisition, would have the authority to develop, revise, and delete mandatory contracting, quality assurance, and program management courses conducted by the associate members. Additionally, associate members would meet all mandatory training course requirements before any non-mandatory course requirements could be satisfied. The Under Secretary of Defense for Acquisition would, as appropriate, provide evaluations to accompany the efficiency/fitness reports of associate members' Commandants/Commanders. The list of associate members would initially include:

- o Defense Systems Management College, Fort Belvoir, VA
- o Air Force Institute of Technology, Wright-Patterson AFB, OH
- o Army Logistics Management Center, Fort Lee, VA
- o Director, Contracts and Business Management, Office of the Assistant Secretary of the Navy (S&L), Washington, D.C.
- o Lowry Technical Training Center, Lowry AFB, CO
- o Extension Course Institute, Gunter AFB, AL
- o Army Management Engineering Training Activity, Rock Island, IL
- o Systems Acquisition School, Air Force Systems Command, Brooks AFB, TX

- o Work Force Effectiveness and Development Division, Office of Civilian Personnel, Defense Logistics Agency, Cameron Station, Alexandria, VA

2) The President of the University would be a general/flag officer. Until such time as a general/flag officer billet becomes available, the Commandant of the Defense Systems Management College would serve as the University President. The Office of Vice President would be filled by a civilian official of appropriate rank and experience. Essential supporting staff to the President and Vice President would be provided by separate personnel authorization. The President would be accountable to the Under Secretary of Defense for Acquisition for the fulfillment of the University's mission. The Under Secretary would provide appropriate policy and direction for the training and education of the acquisition work force.

3) The University administration and staff would be located at Fort Belvoir, VA. The Phase I organization chart is contained in Figure 1.

4) The existing role of the DSMC Policy Guidance Council and the Board of Visitors would be broadened to include the scope of activities of the University. (See Enclosure 2 to DoD Directive.) Under the direction of the Under Secretary of Defense for Acquisition, the Policy Guidance Council would provide to the University the applicable direction and guidance regarding the operation of DUAM. The Board of Visitors would provide the University advice on curriculum-related matters such as course accreditation, standards and evaluation, non-traditional methods, etc.

5) The Defense Contracting and Acquisition Career Management Board (DCACMB), the Defense Quality and Reliability Assurance Career Management Board (DQRACMB), the Defense Management Education and Training Board (DMET), and the Curriculum Advisory Council would be advisory bodies. As such, each would provide the University appropriate guidance in the form of recommendations regarding the University's operation with particular emphasis on curriculum standards and evaluation matters.

6) The Curriculum Advisory Council, composed of representatives from the Service schools conducting acquisition courses, would be established. Its primary purpose would be to review acquisition curricula and related instructional methods and materials, ensuring that the acquisition training curriculum for each acquisition job function is compatible with DoD requirements and that the courses are supportive of that curriculum. The Council would ensure that there is no unnecessary duplication of courses. It would facilitate appropriate communications and crossfeed relationships among the various service schools.

7) The responsibility for teaching the mandatory courses would remain with the associate members. Members would develop, revise, or delete the mandatory courses based on the direction and guidance provided by the University president. These courses would be certified by the University. However, funding for student travel and per diem for the mandatory courses would be provided by the University. The University would provide the mechanism for funding -- in essence, the University would be an honest broker to provide the necessary resources to meet Service requirements. It would develop the student travel and per diem budget. These costs would be based on the annual mandatory requirements submitted by the Services and DoD agencies. A valid requirement is one necessitated by DoD directive, an

individual's job function and level, and the requirement to train not less than 85 percent of the annual mandatory requirements. Services and DoD agencies would be provided a block of quotas annually by the University to administer, based on their requirements, for the mandatory courses. Predominantly Service unique non-mandatory courses would continue to be taught and funded by the service schools. In addition, the DUAM would develop and maintain a strong standards and evaluation program. Research activities would provide support to associate members as well as other appropriate DoD elements and other federal agencies. Its efforts would be complementary rather than redundant to such organizations as the Logistics Management Institute.

8) The University would have appropriate personnel staff authorizations and would program and budget for these resources. The University would also fund staff and student per diem and travel costs and support costs, through the Army.

9) The Services and DoD Agencies would develop a separate operating budget account number for acquisition training within Major Force Program VIII. The Services and agencies would designate an appropriate budget office to serve as the budget account monitor. A separate fund cite would be developed for mandatory acquisition training. Existing TDY voucher and pay account procedures would continue to be used by the Services and Agencies.

10) The University staff would have three divisions: Standards and Evaluation; Plans and Programs; and Curriculum and Research. Division heads would be GS-15 or Military 05/06; division members would be GS-6/14 or Military 04/05 (see Figure 1 for grade breakdown). Division responsibilities would be:

Standards and Evaluation Division: Review course materials and the adequacy of facilities and training equipment; certify courses; establish common methods and procedures; establish standards for student grading.

Plans and Programs Division: Construct program based upon requirements, quotas and funding; develop and manage budget; promote consultative services.

Curriculum and Research Division: Provide oversight; minimize duplication; provide interface for accreditation; develop new programs; develop agenda items for Curriculum Advisory Council; promote and conduct appropriate information services, publications and research.

11) Each student, upon fulfillment of the course requirements, would receive a University certificate of completion or diploma issued by the associate member responsible for the student's course.

b) MISSION

1) To establish and maintain excellence in education and training in the essential elements of defense acquisition management.

2) To train and develop acquisition professionals.

3) To enhance the capability of personnel in the DoD acquisition process.

4) To promote defense acquisition information.

5) To promote and conduct acquisition research.

c) SCOPE

1) Provide resident and non-resident education and training courses in all aspects of acquisition pertaining to contracting, quality assurance, and program management activities.

2) Conduct research on related acquisition subjects.

3) Provide consultive services to the acquisition community.

4) Promote and provide appropriate information services and publications.

5) Establish and maintain professional interchange with education, training, research, and professional institutions and organizations.

d) ACCREDITATION

Once the University is established, it would seek formal accreditation by the Mid-Atlantic Association of Secondary Schools and Colleges. The University would not be degree-granting initially but would offer undergraduate and graduate credits for its courses. Students desiring course credit would select that option at the beginning of each course. Those taking the course for credit would receive a letter grade. Students grades would be maintained by the University registrar, who would provide transcripts upon appropriate request.

e) RESOURCES

1) Staff

The University would require 14 individuals (includes President and Vice President) to conduct its activities. Five professionals would staff the Standards and Evaluation Division; two would staff the Plans and Programs Division; two would staff the Curriculum and Research Division; and three Secretaries would provide support (see Figure 1). Transfer or application of manpower authorizations

from the Services and Agencies to the University would be directed by the Deputy Secretary of Defense through the Under Secretary of Defense for Acquisition.

2) Phase I University Funding

The University would program and budget for its resources such as University staff salaries, per diem and travel, and support costs in addition to student per diem and travel costs. Start-up costs would be approximately \$55,000 to \$60,000 for furniture, office equipment, and supplies. Annual costs would be approximately \$650,000 including \$600,000 for civilian salaries and \$50,000 for travel and per diem and support. The Plans and Programs Division would prepare an annual POM input to be included with DSMC's POM submission.

3) Associate members would continue to program and budget for their own resources. However, if additional instructional resources and supporting facilities are required over and above that authorized for the mandatory courses, then the Associate Members would present to the University a detailed justification plan for them. The University would review the request and see if training adjustments could be made across the DoD acquisition training base to eliminate the need for the additional resources. If adjustments could not be made, then the request for additional resources would be forwarded to the Under Secretary of Defense for Acquisition for appropriate action and direction.

4) Facilities

Suitable office facilities would be provided for the University's personnel by DSMC at Fort Belvoir, Virginia. Facility modification costs are not included in the figure noted above.

2. PHASE II-CONSOLIDATED UNIVERSITY

a) CONCEPT

1) During the consortium phase, plans would be prepared to work toward a consolidated University approach, if it proves to be cost effective, feasible, and desirable. The University would have initially two principal colleges and an institute under its direct command--the Defense Contracting and Quality Assurance College, the Defense Systems Management College, and the Institute of Acquisition Research. The Phase II organizational chart for the DUAM is contained in Figure Two.

2) The University President would be either a three star general/flag officer or civilian equivalent. The Vice President would be of appropriate rank or grade. Either the President or Vice President would be military, the other civilian.

3) The University would be located in the metropolitan Washington D.C., area and would report to and be under the direct control of the Under Secretary of Defense for Acquisition. The Secretary would provide the appropriate policy and direction for the training and education of the work force.

4) Policy Guidance Council and Board of Visitors; Advisory Bodies; and Curriculum Advisory Council: All same as Phase I.

5) The responsibility for funding and teaching the present mandatory courses, currently taught by the five Service schools, DSMC and a contractor, would be transferred to the University. These courses would be taught at the University campus, at Regional Centers or on-site, as appropriate. Non-mandatory courses that are predominantly service unique could continue to be taught and funded by the Service schools.

6) The University would have appropriate personnel authorizations and would program and budget for all its resources including faculty salaries (excluding military members), student per diem and travel costs, and support costs, through its designated executive agent--the Army. Quotas would be issued to the Services and DoD Agencies by the DUAM based on validated requirements.

7) The University would determine, in coordination with the Services/Agencies, the annual training requirements. The University would cost out the requirements and provide a budget submission for its funding requirements, (including faculty pay, per diem and travel costs, and support costs).

8) The University would establish faculty development programs, as necessary, to produce highly skilled instructors.

9) The University, with the assistance of the Curriculum Advisory Council, would ensure that all course curricula stay current with existing acquisition policy, guidelines, and management philosophy. The DCACMB and the DQRACMB would review applicable curricula and provide appropriate advice to further ensure currency and subject matter sufficiency.

b) MISSION: Same as Phase I except add "To assemble and disseminate defense acquisition information."

c) SCOPE & ACCREDITATION: Same as Phase I.

d) RESOURCES: Resources to support Phase II faculty/staff, funding, and facilities will be developed by the Phase I University staff if the consolidated University is determined to be a viable option.

If the Phase II option is pursued, facilities could become available in calendar year 1988--the Engineer's School will move from Ft. Belvoir, VA to Ft. Leonard Wood, MO. If additional facilities, particularly those supporting the Engineer's School, such as Humphreys Hall, were made available to the University, they or similar metropolitan Washington area facilities would accommodate the University faculty, staff, and students to meet the training requirements.

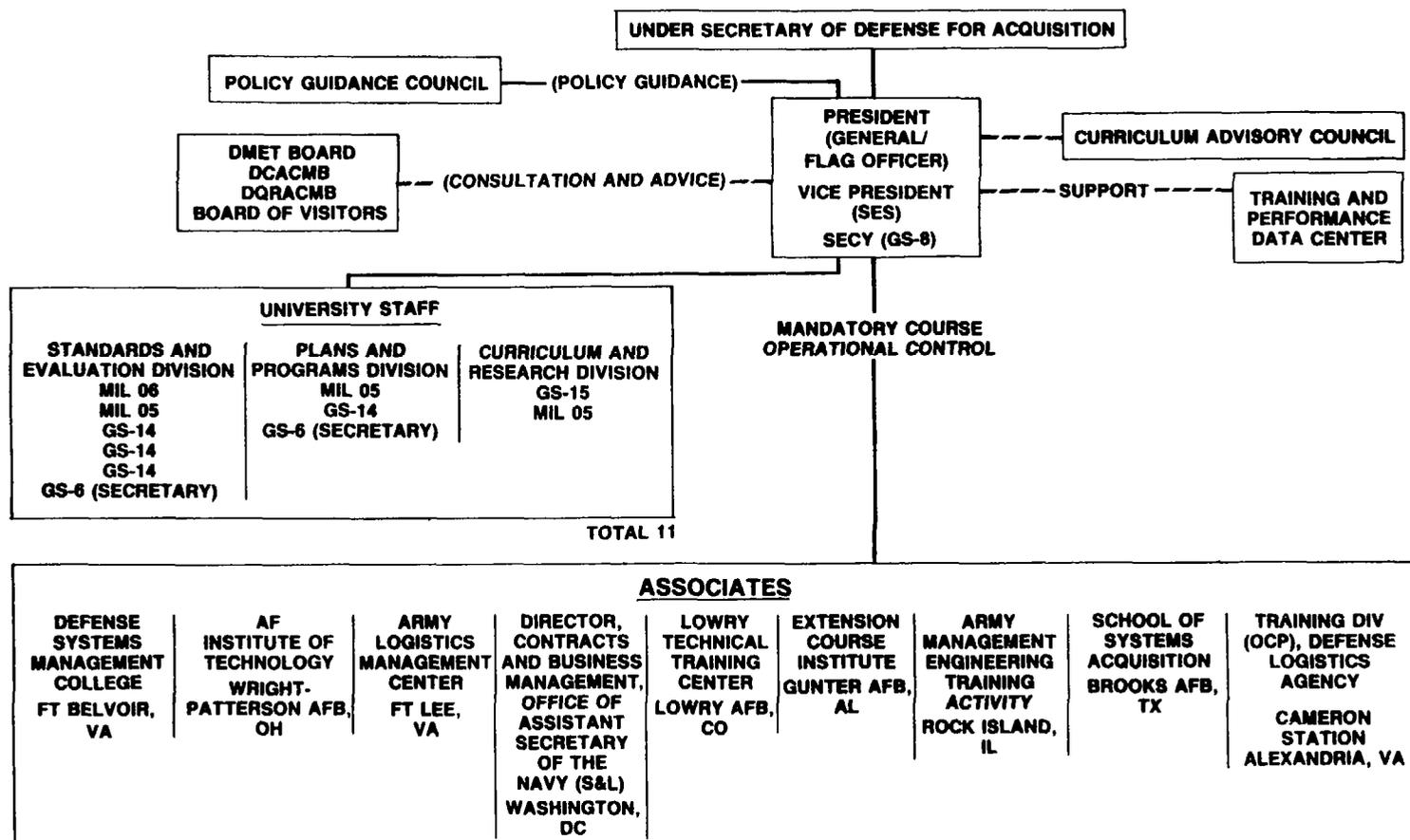
SUMMARY DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

All major DoD acquisition training institutions were visited and comprehensive course evaluations conducted. After extensive research and discussion, a clear pattern emerged: The totally decentralized DoD acquisition training effort, for all its excellent efforts on the part of individual schools, instructors and administrators, simply falls far short of fulfilling DoD's acquisition training requirements. Most significantly, we confirmed the existence of a wide range of problems, many of which can be alleviated.

The DoD's present acquisition education and training base demands some adjustment. The potential rewards are significant, both in efficiency and effectiveness. Trauma to the system is inevitable in any major reorganization; however, it should be reduced by the phased approach we have developed.

We recommend that this phased approach for the establishment of a Defense University of Acquisition Management be adopted as the best vehicle to address the problems. The key elements needed are direction, communication, and accountability: the recommended organization, with a clear mission and adequate resources, would provide a strong base of competency-based training for the acquisition work force needed to build and support this nation's defenses into the 21st century.

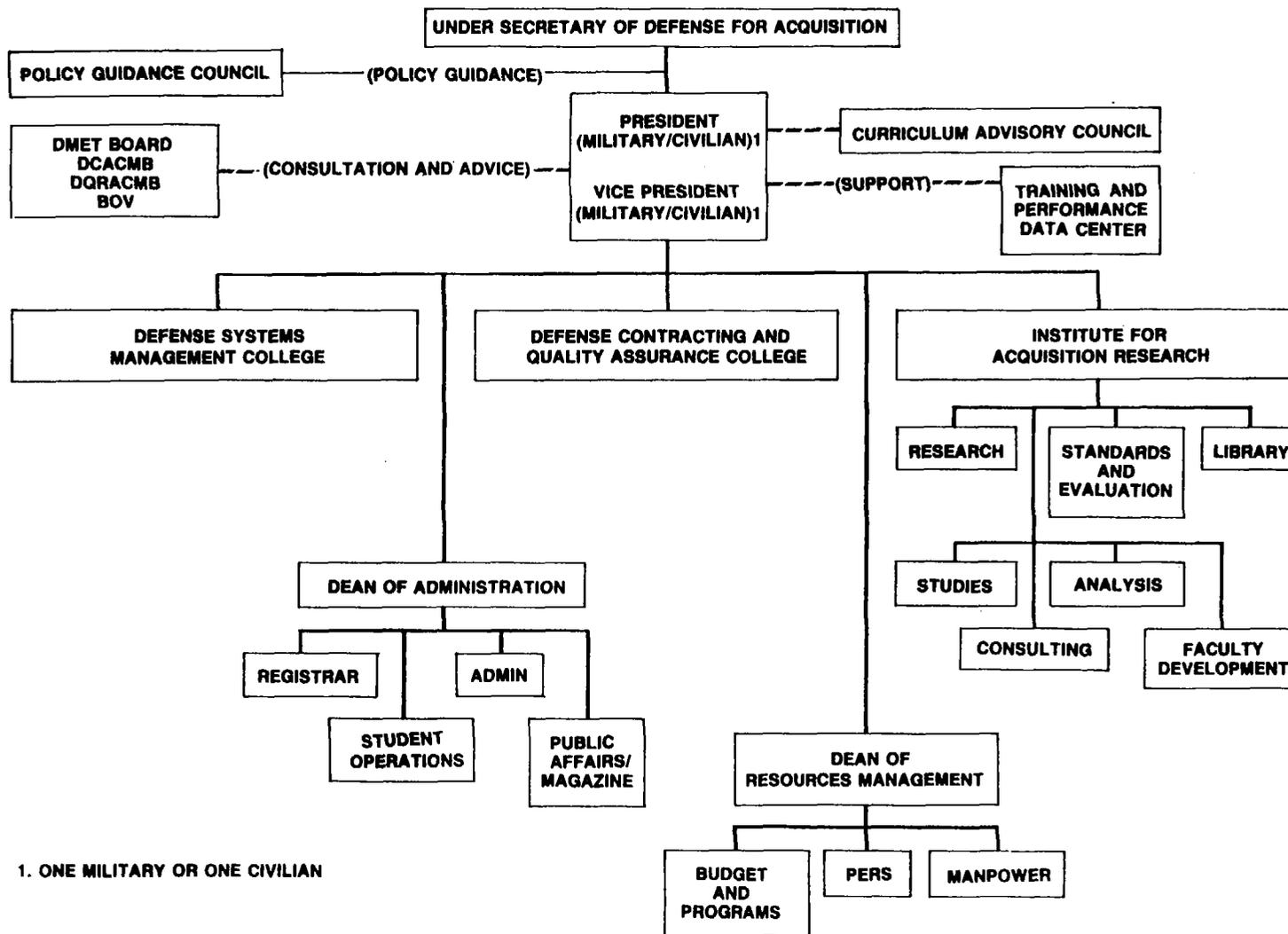
ORGANIZATIONAL CHART(PHASE I - CONSORTIUM) DEFENSE UNIVERSITY OF ACQUISITION MANAGEMENT



SECTION VI, FIGURE 1

OPTION

ORGANIZATIONAL CHART FOR DEFENSE UNIVERSITY OF ACQUISITION MANAGEMENT (PHASE II-CONSOLIDATED)



-73-

1. ONE MILITARY OR ONE CIVILIAN

SECTION VI, FIGURE 2

POLICY GUIDANCE COUNCIL

**Under Secretary
of Defense
for Acquisition**

**Assistant Secretary
of Defense
(Acquisition and
Logistics)**

**Assistant Secretary
of Defense
(Comptroller)**

**Assistant Secretary
of Defense
(C³I)**

**Assistant Secretary
of Defense
(Force Management
and Personnel)**

**Commander
Air Force
Systems Command**

**Commander
U.S. Army
Materiel Command**

**Commander
Air Force
Logistics Command**

**Deputy Chief of
Naval Operations
(Logistics)**

**Assistant Secretary
of the Army
(Research, Development
and Acquisition)**

**Assistant Secretary
of the Navy
(Research, Engineering
and Systems)**

**Assistant Secretary
of the Air Force for
Research, Development
and Logistics**

**Assistant Secretary
of the Navy
(Shipbuilding and
Logistics)**

**Director of Program
Analysis and Evaluation
Office of the Secretary
of Defense**

Section VI, Figure 3

DATE: _____

NUMBER: 5160.XX

DEPSECDEF

DEPARTMENT OF DEFENSE DIRECTIVE

SUBJECT: Defense University of Acquisition Management

References:

(a) DoD Manual 1430.10-M-1, DoD Civilian Career Program for Contracting and Acquisition Personnel.

(b) DoD Manual 1430.10-M-2, DoD Civilian Personnel Career Program for Quality and Reliability Assurance Personnel.

(c) DoD Directive 5000.23, System Acquisition Management Careers.

(d) DoD Directive 5000.48, Experience, Education and Training for Personnel Assigned to Acquisition: Contracting, Quality Assurance, and Business and Financial Management.

(e) DoD Directive 5010.16, Defense Management Education and Training Program.

(f) DoD Directive 5160.55, Defense Systems Management College.

I. PURPOSE.

This Directive: (a) establishes and authorizes the operation of the University; (b) provides guidance and criteria for the University's mission, supervision, and administration; and (c) issues the charters for the University Policy Guidance Council (PGC) and Board of Visitors (BOV).

II. APPLICABILITY AND SCOPE.

The provisions for the Directive apply to the Military Departments, the Under Secretary of Defense for Acquisition; the Assistant Secretary of Defense for Force Management and Personnel; the Assistant Secretary of Defense for Comptroller; and those Defense Agencies concerned with defense acquisition management.

III. ROLE AND MISSION.

A. The University established by this Directive is a Department of Defense institution operating under the direction of the Under Secretary of Defense for Acquisition.

B. The mission of the University is:

1. To establish and maintain excellence in training and education in the essential elements of defense acquisition management.

2. To train and develop acquisition professionals.

3. To enhance the capability of personnel in the DoD acquisition process.

4. To assemble and disseminate defense acquisition information.

5. To promote and conduct acquisition research.

C. The University will accomplish its mission by:

1. Providing resident and on-site training and education courses in all aspects of acquisition management including, but not limited to, contracting, quality assurance, and program management activities.

2. Promoting and conducting research on related acquisition subjects.

3. Providing consultive services to the acquisition community.

4. Promoting and providing appropriate information services and publications.

5. Establishing and maintaining professional interchange with educational, training, research, and professional institutions and organizations.

IV. COMPOSITION AND STRUCTURE.

- A. The University will initially consist of a consortium of those DoD colleges, schools, and education centers conducting the mandatory courses listed in DoD Directives 5000.48 and 5000.23. Other schools may be designated as Associate Members of the University by the Under Secretary of Defense for Acquisition. Under the consortium, the authority of the University to exercise direction is initially restricted to the mandatory courses, along with the quotas and funding for student travel and per diem. The University may be phased into a consolidated University if determined to be cost effective, feasible, and desirable. At that time, the University will exercise total resource control and direction of appropriate courses including the teaching of the courses, funding, standards and evaluation, research and publication, and consultative services.

B. The President of the University (consortium) will be a general/flag officer. Until such time as a general/flag officer becomes available, the Commandant, DSMC, would serve as the University President. The Office of Vice President will be filled by a civilian official of appropriate rank and experience selected by the President. Essential supporting staff to the President and Vice President will be provided by separate personnel authorizations.

C. A Memorandum of Understanding (MOU) between the University and Associate Members will govern the relationship during the consortium phase of the University. The MOU will be in place 90 days after the implementation of this directive. An implementation plan will guide the initial implementation of the University for both phases--consortium and consolidated.

V. RESPONSIBILITIES.

A. The mission, composition, and operation of the University Policy Guidance Council and the Board of Visitors are described in each of their charters (Enclosures 1 and 2).

B. The Under Secretary of Defense for Acquisition will be the focal point for policy and direction governing the University and will be the reporting official for the University President. The University PGC will provide policy and guidance to the administration of the University.

C. The BOV, composed of members from academia, business, and the defense community, will provide appropriate advice on the University's operation and maintenance including instructional programs, materials, and facilities. Board mem-

bers will be selected by the Under Secretary of Defense for Acquisition and serve for staggered terms of 3-5 years.

D. The Defense Contracting and Acquisition Management Board (DCACMB), the Defense Quality and Reliability Assurance Career Management Board (DQRACMB), and the Defense Management Education and Training Board (DMET) will be advisory bodies to the University.

E. The President of the University will:

1. Operate the University as a decentralized activity during the consortium phase for the professional training and education of military and civilian personnel in appropriate facets of the acquisition process.

2. Implement the policy guidance provided by the University PGC and approved by the Under Secretary of Defense for Acquisition.

3. Establish and maintain cohesiveness of training and education among the courses offered by the Associate Members.

4. Ensure the mandatory courses and equivalent courses offered by the University and Associate Members are directed toward the objective of improving the professionalism of the acquisition work force.

5. Ensure that the number and content of courses are appropriate.

6. Use effective curriculum procedures and controls to govern the development, revisions or curtailment of the mandatory courses.

7. Certify all mandatory courses.

8. Promote and foster non-traditional training methods and training technology.

9. Ensure that the mandatory courses are available in a timely manner to personnel requiring them without regard to service affiliation or location.

10. Provide the Services and Agencies the approved per diem and travel funding and block of quotas based on the annual training requirements.

11. Provide out-of-cycle quotas requested and substantiated by the Services and DoD Agencies.

12. Ensure the conduct of research or special studies directed toward improving curricula and increasing the body of knowledge in the acquisition field.

13. Conduct research and disseminate the appropriate findings and acquisition information to OSD, the Services, DoD agencies, and the defense industry community.

14. Submit the nominations for the BOV to the Under Secretary of Defense for Acquisition, appoint a Secretary to the Board from the University staff, schedule all meetings of the BOV, report recommendations of the BOV to the PGC,

and obtain their concurrence with the actions planned to be taken on the recommendations.

15. Provide a faculty development program to produce highly skilled instructors.

16. Develop course schedules, rosters, and certification procedures.

17. Provide uniform standards for the administration of equivalency tests and conduct appropriate analyses to ensure their validity.

18. Submit an annual operation and maintenance budget to include student per diem and travel, and also submit a 5-year forecast.

F. The Secretaries of the Military Departments and Directors of the concerned DoD Agencies will:

1. Provide appropriate manpower authorizations to staff the University for both Phase I (consortium) and, if developed, Phase II (consolidated).

2. Ensure that the Service schools and centers develop effective working relationships between the University and the schools.

3. Submit to the University the annual requirements and 5-year projections for each mandatory course to meet at least 85 percent of the mandatory training and education requirements.

4. Execute the TDY-to-school program through a separate budget account number and fund cite.

5. Administer quotas and payments for student per diem and travel.

6. Maintain no-show data and provide same to the University on an as required basis.

7. Ensure that military fitness/efficiency reports and civilian performance appraisals for all supervisory personnel include statements discussing the supervisor's efforts to train his personnel.

G. *The Secretary of the Army, or his designee, will:*

1. Provide support services and maintain facilities and equipment essential to the functioning of the University.

2. Ensure that administrative and resource support to the Office of the President, Vice President, and staff of the University is timely, adequate, and supportive of the University's mission.

3. Include the University's annual budget in the Department of the Army's overall budget and financial plan and POM submission. However, in this regard, no adjustments in the University budget, POM submission, manpower, or facilities can be made without the written approval of the Under Secretary of Defense for Acquisition.

H. During the Consortium arrangement, the Defense Systems Management College will provide appropriate personnel, administrative, budget, registrar, and supply support services.

I. The Training and Performance Data Center and the Defense Logistics Agency will jointly develop and publish annually an expanded Training and Operation DMET Catalog that incorporates the training and development master plan of DoD 1430.10-M-1, DoD Manual 1430.10-M-2, and other DoD acquisition training directives.

V. ADMINISTRATION.

A. The President of the University will be selected by the Under Secretary of Defense for Acquisition and report to him.

B. Each Service and the Defense Logistics Agency will nominate officers with the appropriate rank and qualifications requested by the University President to assist him staffing the University. All nominees will be approved by the University President or Vice President. The tour of duty for the military members will be at least three years.

VII. PROGRAMMING, BUDGETING, AND FINANCING.

A. Under Phase I, the University, with Defense System Management College assistance, will program and budget student travel and per diem, equipment, supplies, and salaries for civilian staff members. Under Phase II, the University will be responsible for programming, budgeting and financing all expenses incident to its operation, except salaries for military personnel. The University will separately identify all such expenses in its operation and maintenance budget and financial plan and then submit to its executive agent, the U.S. Army.

B. The pay and allowances and permanent change-of-station travel expenses of military personnel permanently or temporarily assigned to the University will be borne by the military service to which such personnel belong.

C. Associate members will program and budget for their resources. However, if additional instructional resources and supporting facilities are required over and above that authorized for the mandatory courses, then the Associate members would present to the University a detailed justification plan for them. The University would review the request and see if training adjustments could be made across the DoD acquisition training base to eliminate the need for the additional resources. If adjustments could not be made, then the request will be forwarded to the Under Secretary of Defense for appropriate action and direction.

IX. EFFECTIVE DATE OF IMPLEMENTATION.

Enclosures

DEPUTY SECRETARY OF DEFENSE

1. Charter of the University Policy
Guidance Council
2. Charter of the University Board of
Visitors

CHARTER OF THE DEFENSE UNIVERSITY OF ACQUISITION MANAGEMENT POLICY GUIDANCE COUNCIL

I. PURPOSE

This charter prescribes the mission, composition, and operation of the Defense University of Acquisition Management Policy Guidance Council (hereinafter referred to as the Council).

II. MISSION

The mission of the Council is to (a) establish policy, provide guidance, and act as prime jurisdictional agent for the operation and administration of the University, (b) review and approve the admissions policy and the curriculum of each associate member, and (c) nominate members to the University Board of Visitors.

III. COMPOSITION

The members of the Council are the Under Secretary of Defense for Acquisition, who serves as Chairman; Assistant Secretaries of Defense (A&L), (C), and (FM&P); the Director, Program Analysis & Evaluation; a representative of the Secretary of each Military Department; the Commanders Army Materiel Command, Air Force Systems Command, and Air Force Logistic Commands, and the Deputy Chief of Naval Operations (Logistics). The Chairman will appoint a recording secretary.

IV. OPERATION

All meetings will be held at the call of the Chairman. The Council will meet at least once each fiscal year with the University. The President will review current operations and approve the five-year plan.

V. DURATION

The Council will be evaluated annually by the Chairman to determine whether the Council should be continued and, if so, whether its role should be changed.

VI. DATE OF REAFFIRMATION

CHARTER OF THE DEFENSE UNIVERSITY OF ACQUISITION MANAGEMENT BOARD OF VISITORS

I. OFFICIAL DESIGNATION

Defense University of Acquisition Management Board of Visitors

II. OBJECTIVES AND SCOPE

A. The Defense University of Acquisition Management Board of Visitors (hereinafter referred to as the Board) is composed of members appointed by the Under Secretary of Defense for Acquisition upon the recommendations of the President of the University and the Policy Guidance Council (PGC). The Board advises the Under Secretary, through the President and PGC, on organization, management, curricula, methods of instruction, facilities, and other matters of interest to the University.

B. The Board shall consist of nine Members-at-Large.

1. Members will be selected on the basis of their preeminence in the fields of academia, business and defense industry, as necessary to cover the interests of the University.

2. Members will serve terms of either 3, 4, or 5 years; however, a 1-year extension may be granted by the Under Secretary of Defense for Acquisition upon submittal of a recommendation by the President of the University and/or the PGC.

C. The Chairman of the Board shall be selected from its membership, subject to approval by the Under Secretary of Defense for Acquisition.

D. The Secretary to the Board shall be appointed by the University President from the President's staff.

III. DURATION

The need for this advisory function is on a continuing basis. However, it is subject to renewal every 4 years.

IV. AGENCY OR OFFICIAL TO WHOM BOARD REPORTS

The University Board of Visitors reports to the Under Secretary of Defense for Acquisition through the University President and PGC.

V. AGENCY PROVIDING SUPPORT

A. The University President shall provide such technical or administrative assistance as is needed by the Board. In particular, the Secretary to the Board shall attend all meetings and be responsible for the proper functioning of the Board in accordance with Public Law 92-463, Executive Order 1186 and implementing Office of Management and Budget (OMB) and DOD Regulations for Federal Advisory Committees. The Board Secretary is responsible to the Chairman for the planning, operation, and coordination of the work of the Board and shall have specific authority to adjourn any meeting of the Board or its working groups which is not considered to be in the public interest.

B. The University will bear the expenses of Board members, including consulting fees, travel, and subsistence.

VI. DESCRIPTION OF DUTIES

A. The mission of the Board is to advise the Under Secretary of Defense for Acquisition through the University President and the Policy Guidance Council on the overall mission and operations of the University, including organization, management, acquisition curricula, methods of instruction, career-related activities, research and overall operation of the University. To further this mission, the Board shall also concern itself with policy matters in the area of long-range planning. It shall advise the President on solutions to pressing and complex problems of policy development and principles to be followed bearing on the accomplishment of the University mission.

B. The Board shall be responsive to requests or assignments from the Under Secretary of Defense for Acquisition and the University President.

C. The procedures for developing the advice and findings of the Board shall be as flexible as is consistent with its defined purpose.

D. The Chairman of the Board shall submit an annual report to the Under Secretary of Defense for Acquisition, setting forth the results of its examinations and recommendations.

VII. ESTIMATED ANNUAL OPERATING COSTS

The estimated annual operating cost of the University Board of Visitors is \$10,000 plus about one-quarter man year of full-time staff support.

VIII. ESTIMATED NUMBER AND FREQUENCY OF MEETINGS

A. The University Board of Visitors shall meet at least once each year, or at the call of the Under Secretary of Defense for Acquisition, on such dates as may be selected by the Chairman of the Board.

B. Each meeting of the Board will be limited to 3 days or less in length.