to ensure that the outputs and standards of the management study and the PWS are identical. The management study will not be approved until the PWS is complete and the work requirements and performance levels agree.

Section VI. Management Study Process

- The management study should be conducted 3-27. <u>Team Selection</u>. by a team with expertise in management analysis, manpower, position classification, work measurement, VE, CA program management, cost estimating, industrial engineering, and the functions under study. A senior person from the management analysis activity in the Resource Management Office/Office of the Comptroller should be the management study team leader to ensure impartiality of the results. The management study must be coordinated with the person responsible for the entire CA study. The management study leader should have the means available to task representatives with the required expertise to serve on the management study team. Prior coordination with the Personnel Officer and the functional manager is necessary to ensure cooperation and access to resources from these areas for the study team. Also, coordination with the HQUSACE manpower representative is required to ensure that only minimum essential staffing is properly documented in the completion of Schedules X, manpower manning documents, and TDA.
- 3-28. <u>Sources of Information</u>. The study team should use all available information about the organization under study. Some valuable sources of information are:
- a. Civilian personnel classification and position management reviews,
 - b. Manpower surveys,
 - c. Audits,
 - d. Inspections and staff visit reports,
 - e. Previous studies,
 - f. Available detail or summary level standards,
 - g. Standard operating procedures.

- 3-29. <u>Management Improvements</u>. Primary emphasis should be placed on determining the most efficient and economical way to perform essential missions through consideration of:
 - a. Procedural changes,
 - b. Revisions in paper flow,
 - c. Restructure of the organization or job redesign,
 - d. Facility layout change,
 - e. Equipment improvements,
- f. Elimination of nonessential positions or addition of specialized positions,
 - g. Consolidation of organizations, activities, or functions,
- h. Elimination of redundant supervision, leaders, functions or tasks,
 - i. Reduction in the number of reporting levels,
 - j. Increase in supervisory span of control,
- k. Reduction in clerical and other support positions using staffing patterns, staffing ratios or other methods such as technological advancements.
- 3-30. <u>Disposition of Military Personnel</u>. If military positions are present in the organization under study, they will be converted to civilian positions for cost comparison purposes. Military personnel assigned to the CA under study will not be transferred until the MEO is implemented. Civilian grades and series will be based on the work described in the PWS and MEO rather than on current organization structure. Assistance from the Personnel Office is essential in determining the grade accuracy and number of positions in the Government's in-house staffing estimate. (See paragraph 3-56 on treatment of military and civilian spaces.)

- 3-31. <u>Management Study Disciplines and Techniques</u>. The analytical techniques used should be described in the management study report. Some techniques that may be used are:
- a. Methods study and management improvement techniques. Several special management analysis techniques exist that can be used to identify problems, duplication of effort, layering of supervision, lost motion, need for delegation, and inefficient methods. These techniques include developing a flow chart of the process, layout analysis, systems and procedures analysis, work distribution analysis, task lists, and linear responsibility charting. Special training in these techniques is available at the Army Management Engineering Training Activity at Rock Island Arsenal, IL.
- b. Technical estimates. This study method may be used to supplement other methods but not replace the need to collect actual data. The technical estimate requires informed subjective judgments by analysts and functional personnel. Staffing by technical estimate may also include directed positions required by law and regulation. Measurement methods such as timing of a good operator or examiniation of historical experience may be used to help in developing a technical estimate. The reasons for using the technical estimate should be described in the study.
- c. Requirements determination techniques. Official, Armywide, workload-driven manpower staffing standards or guides may be used whenever possible to determine minimum essential manpower requirements. This practice ensures consistency and technical adequacy throughout the Army. In the absence of officially approved, workload-driven manpower standards, other approaches may be used with the advice and consent of the HQUSACE manpower representative. (These approaches include technical estimates, statistical techniques, and work measurement methods.)
- d. Statistical techniques. Statistical techniques generally use historical data to project workloads and staffing. They are useful when historical workload and workyear data are available or can be developed. Statistical techniques offer rapid coverage and accurate projections of staffing and workload. Examples are the Manpower Task Force (MANTAF) and the Force Configuration (FORCON) models currently used to estimate military construction and civil works funded manpower requirements.

- e. Work sampling and performance standards. These techniques are detailed and accurate. Because of the relatively short timeframes normally associated with CA studies, ratio delay techniques are useful in providing quick and accurate measures of nonproductive time. Work sampling is especially applicable to smaller functional areas. Analysts should use all information in existence at FOA and other activities that have detailed or summary level standards available.
- f. Position analysis. Position classification specialists and management analysts should analyze the position structure of the organization. The analysis should be as detailed as time permits. The analysts should determine the proper supervisor-to-employee ratio, the need for assistants, and if high-grade positions are diluted with low-grade work. Revised job descriptions proposed for the MEO should be submitted with the management study where job requirements change as a result of the management study. DA Pam 690-36, Chapter 2, and DA Pam 690-8 provide guidance on position analysis. These pamphlets are available through publication distribution channels.

3-32. <u>Performance Indicators</u>.

- a. The performance requirements of the PWS normally pertain only to final outputs. Therefore, it may be necessary for the study team to develop performance indicators for functions below the final output level to assist in developing the in-house organization.
- b. Performance indicators needed to develop the in-house organization should be established at the same time the performance indicators for the PWS are developed. This will ensure no discrepancies or omissions occur that would increase or decrease the size of the in-house organization. The most direct way of evaluating performance is to count output units and compare them to some predetermined requirement. Similarly, resource requirements can be predicted by comparing average outputs per person to projected workload. In some cases, obtaining output information that is easily counted is difficult. In all cases, however, indicators of performance can be devised. When quantitative measures are not feasible, other measures, such as effectiveness or quality, can be used.
- c. Five types of performance indicators are generally used in CA management studies:

- (1) Quantitative. This indicator measures work actually performed, such as number of windows repaired, number of items issued, and number of job orders completed.
- (2) Qualitative. This indicator measures how well output units are produced, such as evaluation of item, reject rates, number of customer complaints, number of accidents per mile.
- (3) Timeliness. This indicator measures the average elapsed time to complete a work unit compared to a requirement, such as response time, average time to issue supplies, average time between submission of a work request and completion of work.
- (4) Effectiveness. This indicator measures mission performance, through such statistics as per cent of items inoperable because of nonavailability of repair parts, equipment deadline rates, pest infestation rate.
- (5) Total cost. This indicator indirectly measures performance and applies when no clear quantitative measure exists or a major managerial responsibility is to control the cost of performance.
- 3-33. Personnel Requirements. All personnel requirements will be expressed in terms of FTEs as prescribed in the Cost Comparison Handbook (CCH) included in Part IV of the Supplement to OMB Circular A-76. When productive hours are used as the basis for computing FTEs, the annual available hours specified in the CCH (1,744 hours for full-time positions and 2,015 for intermittent positions) will determine the staffing requirements. When methods other than productive hours are used (such as manpower standards, prior experience, and work measurement), the method used will be documented in the management study. Personnel requirements, functions and organization must be developed for the residual in-house organization for the function under contract operation and for the MEO if the function stays in-house. Personnel requirements for excluded and exempted tasks should be separately described and identified in the management study.

3-34. <u>Contract Administration Personnel; Contract Administration</u> Waivers.

a. The CA management study identifies the FOA contract administration staffing requirements. Additional positions established for contract administration cannot exceed those

allowed by Table 3-2 unless specifically justified and approved as specified in paragraph 3-34b. Any additional positions established to administer a contract resulting from that particular CA study will be identified by series and grade. (For guidance on DOD funded activities, refer to AR 5-20 dated 20 October 1986, paragraphs 3-3b, c, and d, and 4-22e.)

- b. Contract administration staffing requirements that exceed the established FTE limits require an ASA-level waiver. reason for the deviation from the limits and the supporting alternative computations and documentation will be submitted through channels to CDR USACE (CERM-MC) WASH DC 20314-1000 at least six weeks before the scheduled independent review. requests will be supported by a detailed justification for deviation from the limits specified based on efficient and effective performance of the contract administrator functions identified in FAR Part 42. The documentation submitted for purely civil works funded activities must cover the same topics as those identified in AR 5-20, 20 October 1986, paragraph 3-3b for mixed and purely DOD funded activities. The justification may be based on the function under study being so technically complicated or geographically dispersed that the established FTE limits will not result in effective contract administration. contractor may not provide sufficient quality control, resulting in an additional contract administration effort. In providing any justification, keep in mind that QA plans will be implemented even if activities remain in-house. Thus, contract administration efforts relating to QA enforcement can reflect only the difference between what would be required for contract QA that is greater than what is needed for in-house QA.
- c. QAE may also be performed by existing FOA staff positions on a part-time or additional duty basis. The cost of this QA effort is common to both the in-house and contractor methods of performance in the cost comparison.
- d. Any proper estimating procedure may be used to identify potential placement of personnel into contract administration and QAE positions. Employees so identified should receive training in contract administration and QAE duties well in advance of the conversion. If necessary, training may be initiated before a decision is made to convert a function to contract performance. Since this is

a planning action, more people may receive training than are actually placed in contract administration and QAE positions.

- e. When contract administration and QAE positions are not expected to be filled through RIF or priority placement procedures, recruitment may be initiated up to the point of commitment. Discussions on recruitment for these positions (as well as reassignment to other positions) must emphasize that no predetermination has been made as to the outcome of the CA study (that is, whether the function will go contract or stay in house), and that position offers will be made only if the final decision is to convert to contract.
- 3-35. Documentation of the Management Study. The format for Documenting Management Study, Figure 3-5, presents the format for a management study report. An individual not involved in the study should be able to review the study and follow the logic presented. The office performing the management study should retain previous reports, audits, inspections, surveys and studies as backup to the study report. Note that the documentation must cover the MEO as well as the residual organization for the function under contract operation. It should also include discussion of excluded, excepted and exempted tasks. Quality control and quality assurance procedures for an in-house operation should also be discussed to assure the work performed meets the standards contained in the PWS.

3-36. Approval of the Management Study.

- a. Management studies should not be approved so far in advance that, by the time the solicitation date is reached, the information and workload data are outdated. Final validation for a management study should normally not be granted earlier than a few months before the scheduled release of the solicitation.
- b. Except for new requirements and expansions, required higher level approvals for acquisition of equipment, facilities, and ADP systems must be obtained before approval of a management study, unless approvals depend on completion of the management study or are contingent on the outcome of the CA study.
- c. Only the FOA Commander or his deputy will approve management studies. The management study will be marked "For Official Use Only--Protective Marking Cancelled Upon

Announcement of Initial Decision or Cancellation of CA Study." If essential information in the management study is classified, the classified material will be handled according to AR 340-17. The management study, including the MEO certification, are permanent records and will be retained.

3-37. Certification of the MEO.

- a. The FOA Commander or his deputy must certify the MEO. Figure 3-5 prescribes the format for this certification, which will be attached to the Government's in-house cost estimate when it is submitted to the Contracting Officer. If the final decision in the CA study is to convert to contract and more than 40 civilian employees are involved, Congress is notified of the use of the MEO in the cost comparison based on the FOA Commander's certification.
- b. CA management study teams seek to identify the most efficient and effective in-house organizations to perform CAs. This means that the required level of workload is accomplished with as little resource consumption as possible without degradation of the required level of products or services. Key to understanding the scope and purpose of the FOA Commander's MEO certification is the term "as possible." In-house Government activities are to be organized, staffed, and operated as efficiently as possible, using available resources, within Army, OMB and USACE regulatory policies. Certification of the MEO does not remove the requirement to operate within Government requirements.
- c. The requirement of FOA Commanders to operate both inhouse and contracted functions within Army, OMB and USACE regulatory policies and available resources does not preclude FOA Commanders from requesting either waivers or changes to existing (or future) Army, OMB and USACE policies.
- d. All CA studies and the resulting Government in-house or commercial contractor operation must be conducted according to Army, OMB and USACE regulatory policies and available resources. MEO certification does not relieve FOA Commanders nor their functional staffs from this requirement.

3-38. <u>Implementation of the Management Study</u>.

- a. OMB, DOD, DA and USACE policy dictate that in-house organizations resulting from CA study decisions operate as projected. Implementation of the MEO must therefore be initiated within one month after the final decision (USACE clearance to cancel the solicitation) and be completed within six months of this date.
- b. It is the FOA Commander's option to implement and test the MEO upon his approval of the management study. The MEO will not be implemented before the final decision date in a CA study, however, if implementation would jeopardize the confidentiality of the Government's in-house cost estimate, reduce authorized spaces/FTE, or adversely affect employees. The in-house work force will implement levels of performance and QA measures required of potential contractors and described in the PWS and resulting solicitation upon which all commercial firms bid. Where practical, attrition and reassignments of employees from excess positions will be used to implement the MEO.
- c. Management is responsible for ensuring that jobs are properly classified and employees are productively engaged in necessary work. Voluntary reassignments and management-initiated directed reassignments as well as management actions to correct improper position classifications are not restricted. However, no occupied positions should be eliminated between the date the solicitation is issued and the final decision date. Position structure improvements will be effected as vacancies occur.
- d. In addition, it is expected that contract operations will be conducted as projected as much as possible. Implementation of the residual in-house organization under a contract decision must coincide with the contract award date.
- e. The results of all CA study decisions will be reviewed by FOA and perhaps by other agencies to ensure compliance with approved CA study recommendations including management study results, PWS, and expected costs. Responsibilities of the CA Program Manager at the FOA in this evaluation process are outlined in paragraphs 3-58. In addition, paragraph 3-55 contains additional guidance on implementation of the management study.