



DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT CORPS OF ENGINEERS
P. O. BOX 1890
WILMINGTON, NORTH CAROLINA 28401

SAWOL

22 January 1975

DISTRICT REGULATION
NO. 11-1-1

Army Programs
VALUE ENGINEERING
ADMINISTRATION, POLICY, ORGANIZATION, RESPONSIBILITIES,
AND COST CONTROL

1. Purpose. To outline the policies, responsibilities, organizational procedures, administration, methods for coordination, review, and approval of Value Engineering Studies and contractor-submitted Value Engineering Change Proposals (VECP); and to provide the uniform cost control system for all Value Engineering in the District.

2. Applicable. This regulation is applicable to all components.

3. References.

- a. ASPR 1-17
- b. AR 5-4
- c. OCE Supplement 1 to AR 5-4
- d. EP 11-1-3
- e. ER 37-2-10
- f. DR 1180-1-1

4. General. Each employee connected with the design, construction, or operation of Civil Works projects will be active and aggressive in the developing and reporting Value Engineering projects, and will assist contractors in their efforts to utilize the Value Engineering Incentive Clauses of their contracts. Where such Government employees or contractors' proposals require modification to existing standard plans or to active construction contracts, such changes will be processed in the same fashion as changes initiated for other reasons. The Value Engineering Program is a District program and as such is a responsibility of all employees, supervisors, and management personnel.

5. Organization. The organization for conducting the Value Engineering Program will consist of:

- a. The Wilmington District Value Engineer - District Engineer.
- b. A District Value Engineering Officer (VEO) - A Special Assistant to the District Engineer.

This Regulation supersedes DR 11-1-1, 16 January 1970 and DR 11-1-2, 22 September 1969

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c. Ad Hoc Value Engineering Project Selection Committees (VEPSC) - District VEO, Chairman.

d. Value Engineering Study Teams - to be selected for each study.

e. Value Engineering Training Teams - to be selected as required.

6. Responsibilities.

a. District Engineer. The Wilmington District Value Engineer is the District Engineer and as such directs the overall Value Engineering effort throughout the District.

b. District Value Engineering Officer (VEO).

(1) General Responsibilities.

(a) Establish and maintain an active and productive VE Program within the framework of existing applicable regulations.

(b) Maintain a training program as required to assure that appropriate Government and contractor personnel are familiar with the principles and application of VE.

(c) Assure that there is a continuous effort in the performance of VE in-house studies from reported high cost areas, difficult construction projects, etc.

(d) Promote active contractor participation through encouraging them to submit VECP's under the applicable clauses in their contracts.

(e) Assure that maximum cost reduction through VE is realized by adherence to established VE practices.

(f) Assure that all contract-related organizational elements actively engage in the promotion of contractor participation under VE Incentive Clause.

(g) Keep higher echelons informed as to progress made, especially with regard to attaining assigned goals.

(2) Specific Responsibilities. In carrying out this assignment, the VEO is responsible for developing, planning, directing, coordinating, and (where appropriate) the actual execution of the District's VE Program. He will:

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- (a) Recommend members to serve on the VEPSC's, VE Study Teams, and Training Teams.
 - (b) Monitor all VE efforts.
 - (c) Coordinate summary proposals of VE studies and present them to the District Engineer.
 - (d) Prepare reports in accordance with requirement of higher authority.
 - (e) Prepare reports in accordance with OCE requirements.
 - (f) Initiate requests for funds for special VE studies.
 - (g) Coordinate processing of contractor-submitted VE proposals within District Office.
 - (h) Head VEPSC's and/or Study Teams, or recommend employees to fill that position.
 - (i) Insure through personal presence or representative that VE is covered during contractor preconstruction conferences.
 - (j) Assist Resident Engineers in establishing and maintaining VE Program with construction projects.
 - (k) Work closely with the local chapter of the Associated General Contractors in promoting contractor participation.
 - (l) Develop and coordinate the VE Training Program with the District Employee Development Officer.
- c. Chiefs of Staff Elements. Upon the request of the VEO and proper authorization by the District Engineer, supply manpower for VEPSC's and VE Study Teams.
- d. Branch and Section Chiefs. Review all design and construction projects for high cost areas, present and future cost, and report areas where VE should be applied to the VEO. All personnel under supervision by Branch and/or Section Chiefs will be encouraged by the Branch or Section Chiefs to become an active participant in the VE Program, both as individuals and members of VE teams upon assignment.

e. Resident Engineers. Establish and maintain active VE Programs in connection with construction projects; create and maintain an awareness of the importance of VE among both Government and contractor personnel; cause Government personnel to seek out high cost construction and supply items for District Office and/or in-house study; expedite the processing of all VECP's (always contractor-initiated) and forward them through normal contract modification channels with concurrent notification to the VEO that a VECP is being submitted for processing.

f. All District Employees. Become aware and participate in the VE Program to the extent practicable and assume an aggressive attitude during any formal participation which they may have in the program.

7. Procedures.

a. Ad Hoc Value Engineering Project Selection Committees (VEPSC) will meet as called by the VEO and through the normal techniques of VE such as idea exchange, brainstorming, review of high cost areas, review of difficult design or construction areas, etc., select area(s) suitable for VE.

b. The VE Study Teams will perform the actual work of completing in-house VE studies. They may complete informal Government-sponsored VE studies or investigate contractor-submitted VE proposals for engineering adequacy.

c. All engineers, engineering technicians, and other selected employees not previously trained in VE will receive a minimum of 4 hours' indoctrination in VE. The District will insure each year training of an appropriate number of engineers, technicians, and other selected employees by participation in the OCE 40-hour VE Workshop sponsored by the South Atlantic Division. Other training will be accomplished as required for the carrying out of the program.

8. District Office Procedures - Value Engineering Change Proposals (VECP's) from Contractors (see Flow Chart - Appendix A).

a. Upon receipt of a VECP submitted by a construction contractor, the Construction-Operations Division will forward the proposal to the Value Engineering Officer (VEO).

b. The VEO will take the following actions:

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- (1) Assign a Value Engineering Project Number to the VECP.
- (2) Coordinate costing data for labor charges with Program Development Branch and Budget and Accounting Officer and issue VE charge number.
- (3) Distribute the information in (1) and (2) above to all affected District elements.
- (4) Establish and maintain a suspense file.

c. The Program Development Branch is responsible for furnishing cost account numbers to the VEO for further distribution to appropriate District elements.

d. Finance and Accounting Unit, Office of the Comptroller will provide input to costing system, maintain cost accounts, and provide the VEO a monthly listing of all charges pertaining to Value Engineering only.

e. All District elements which are approved to provide support for the VE effort will charge manpower efforts in accordance with DR 37-1-1. Since costs for VE are separated from regular construction costs and accurate cost data are required, the man-hour allotment for the District elements will not be exceeded without prior coordination with the VEO.

f. Accepted VECP actions by personnel of the Engineering Division will be forwarded to the VEO through the Chief, Engineering Division. In the event a VECP is recommended for disapproval, sufficient reasons therefor will be forwarded to the VEO through the Chief, Engineering Division for inclusion in a letter of rejection to the contractor which will be signed by the Contracting Officer.

g. In the event a disagreement occurs concerning the approval action for a VECP, pertinent information will be forwarded to the VEO, who will refer the information, with recommendations, to the District Engineer for a final decision. Items which will be submitted consist of, but are not limited to, the following:

- (1) Conflicting recommendations for approval or rejection by District elements.

- (2) Widely conflicting cost estimates by the contractor and the Government which have not yielded to negotiating efforts by the Construction-Operations Division.

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(3) Conflicts concerning implementation of proposals on other projects under design or construction.

(4) Conflicts resulting from coordination of the VE effort with higher authority.

9. Modification of Construction Contracts or Designs. Upon approval of any contractor-submitted VECP, the changes shall be immediately implemented with one of the following actions:

a. Construction-Operations Division. When a contractor's proposal is of a minor nature which does not require extensive revision to contract drawings or specifications, a representative of the Construction-Operations Division will modify the contract by using ENG Form 3938, Contract Modification and Acceptance (Modification of \$10,000 or less). A request for this action will be included in the approval correspondence from the VEO to the Construction-Operations Division. Minor changes will be reflected on the as-built documents, as appropriate.

b. Engineering Division. Changes resulting from a contractor's proposal which are not of a minor nature will be implemented immediately by the Design Branch in accordance with DR 1180-1-1. Other similar projects under design or construction will be examined and appropriate action initiated to insure maximum savings. The Design Branch will recommend through appropriate channels method for implementation of changes in standard or repetitive designs.

10. Implementation Cost. In order to have a uniform policy for computing costs for change orders to construction contracts as the result of a contractor's VE proposal, the following will be applied:

a. Routine Government procedures for review, approval, and issuance of modifications to contracts resulting from a contractor's VECP will not be deducted from the total VE savings, even though there are some incidental Government implementation costs.

b. Where VECP's result in extensive design or other changes, the actual costs will be deducted as Government implementation expense.

11. District Office Procedures - Value Engineering In-House Team Studies.
(See Flow Chart - Appendix B).

a. Subjects for VE team studies will be selected, accomplished, and approved in accordance with preceding paragraphs of this document.

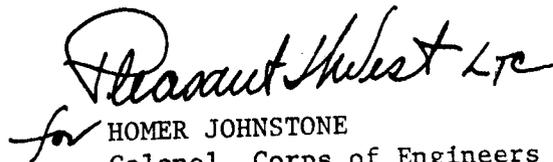
b. Costs for in-house VE team studies will be coordinated utilizing the same procedure as for the VECP.

c. Upon completion of an in-house VE team study, a final report shall be prepared for submission to higher authority for approval. This report will be prepared by a selected member of the study team who will coordinate the report format with the VEO. The report will be submitted to the VEO for presentation to the District Engineer for approval prior to submission (as required) to higher authority. Implementation of approved VE changes will be as directed on an individual basis.

12. District Office Procedures - Individual Value Engineering Efforts.
(See Flow Chart - Appendix C). Costs for review and approval action of individual employee VE efforts will be coordinated utilizing the same procedures as for VECP's. Individual employee VE efforts may be forwarded through the appropriate component chief or through Suggestion Program channels to the VEO. Recommended areas for VE study may be forwarded directly to the VEO. Implementation of approved individual VE efforts will be as directed on an individual basis. Individual studies will be reported as in-house studies by the VEO in reports to higher authority.

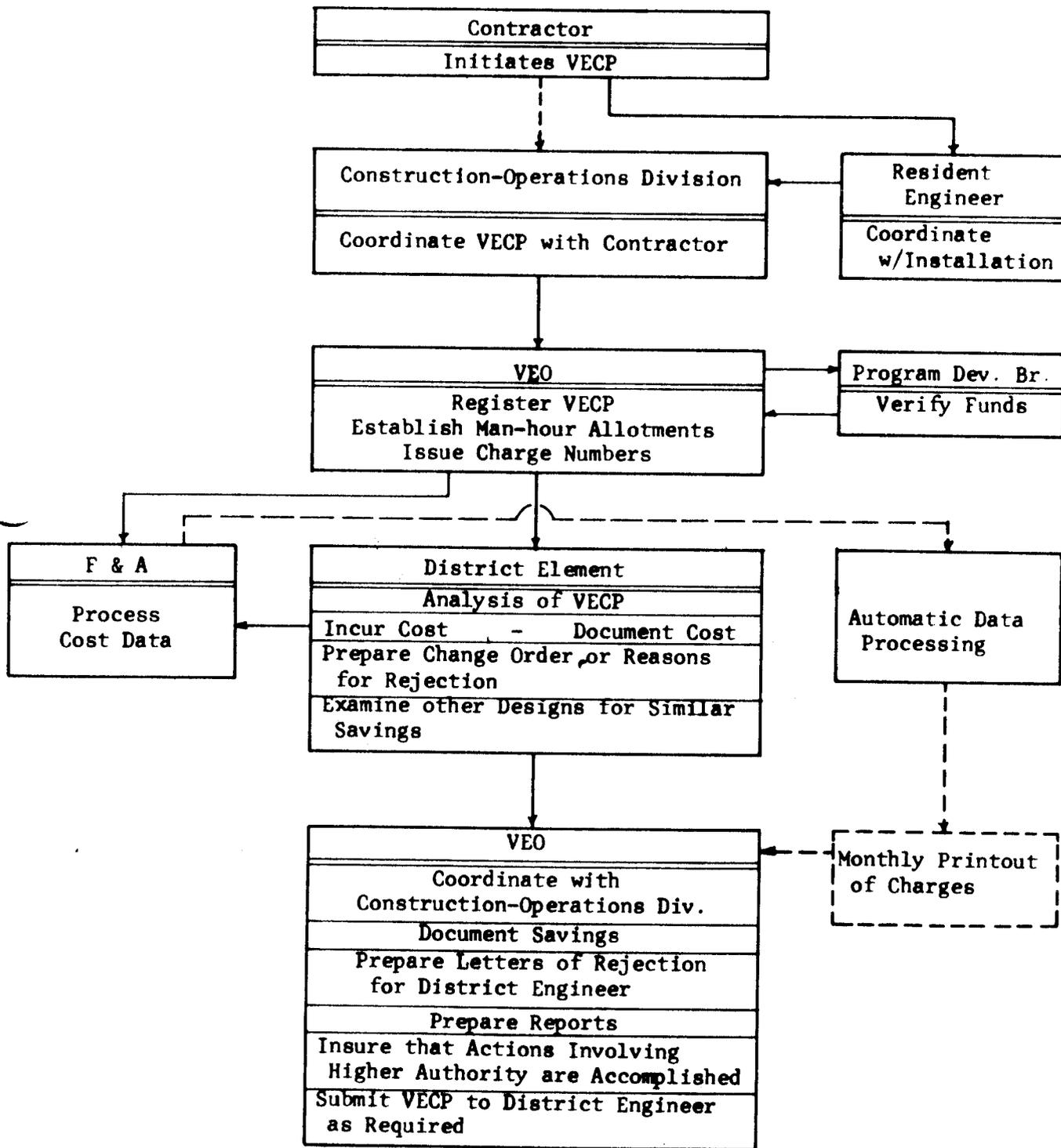
13. Value Engineering Labor Charges and Cost Accounting Procedures.
Costs for VE will be included in direct construction cost similar to Government Furnished Materials and Services for civil construction under provisions of ER 37-2-10. Cost of VE incurred prior to award of construction contract will be initially charged to a clearing account or revolving account with separate subdivisions maintained by civil project feature and charged to construction line item or project feature upon award of construction contract. If a construction contract is not awarded, the VE costs will be distributed on an equitable basis to the next construction work awarded on which VE savings were realized and will be identified as nonproductive VE costs. Cost of VE incurred subsequent to award of a construction contract will be initially charged to the clearing or revolving account but will be immediately charged out to the appropriate projects. VE includes costs of redesign resulting from the VE Program.

- 3 Appendixes
1. VECP Flow Chart (App A)
2. VE In-House Team Study
Flow Chart (App B)
3. Ind VE Effort Flow Chart
(App C)

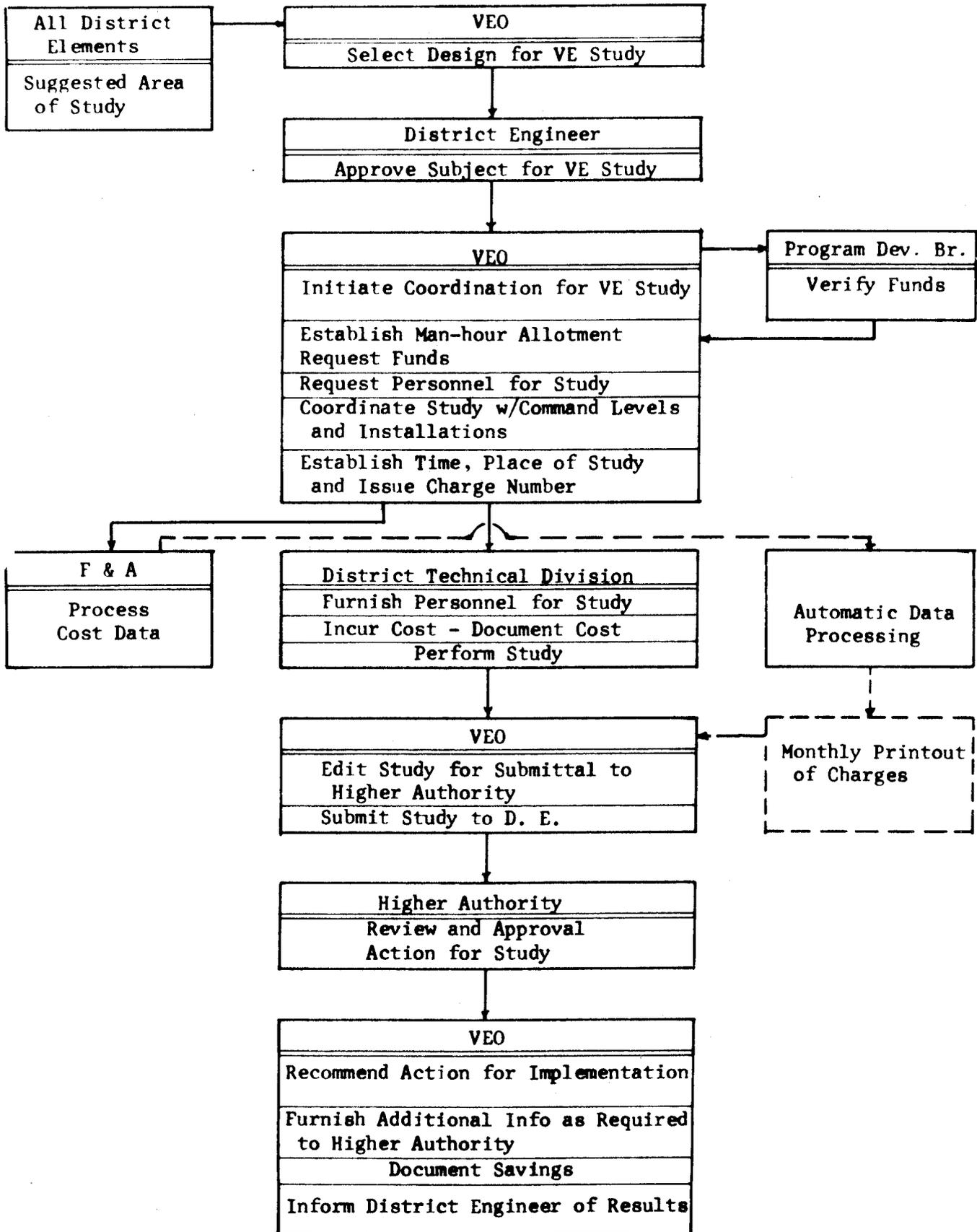

for HOMER JOHNSTONE
Colonel, Corps of Engineers
District Engineer

DISTRIBUTION B
Plus VEO (100)

VALUE ENGINEERING CHANGE PROPOSAL
(VECP)
FLOW CHART



VALUE ENGINEERING IN-HOUSE TEAM STUDY
FLOW CHART



INDIVIDUAL VALUE ENGINEERING EFFORT
FLOW CHART

