



**MCA-QP7303
Revision A
14 August 2002**

**Maintenance Center, Albany
Marine Corps Logistics Base, Albany, GA 31704-0325**

MCA QUALITY PROCEDURE

CODE 883

A TEP DESIGN AND DEVELOPMENT

SIGNATURE/APPROVAL

The signature and date below indicates approval of this procedure for implementation at the Maintenance Center, Albany.

(Trent Blalock Signature on File for)
S. H. FOREMAN
Commander, Maintenance Center, Albany

14 August 2002
DATE

CHECK THE MASTER LIST - VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE

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and/or PM-TMDE Quantico, VA when necessary will review Quad charts. The quad chart may be approved, disapproved or changed based on the conclusion of the review.

4.3 Detail & Development Plan. The EST will develop functional specifications, draft detailed project plans, estimated costs, and develop verification and validation plans. These verification and validation plans are translated into design review, verification and validation milestones and are included into the design plan. After requirements are defined, the project documentation will be submitted to the Acquisition Team to follow MCA-QP7511 Quality Procedure or the Engineering Team.

If the Engineering Support team, other ATEP teams and/or PM-TMDE Quantico, VA determines that Proof-of-Concept is needed, the Engineering Team will initiate a Proof-of-Concept project and track project activities. The IPR may decide:

- a. If a Proof-of-Concept is needed, section 4.4 through 4.8 is followed.
- b. The project should be contracted out; the acquisition process (MCA-QP7511) is followed.
- c. The project should be further developed. In that event, the development process is repeated.
- d. The project should be terminated. The project is closed and no further activity is undertaken.

4.4 Design Output. If a Proof-of-Concept is required the EST will manage and monitor the progress of the development In Accordance With (IAW) the established performance specifications and project plans. Acceptance criteria will be developed by the EST. The Proof-of-Concept will be used to verify and establish operational procedures and conditions, design reliability/maintainability, safety requirements, and Personnel requirements. Tests and analysis of the Proof-of-Concept will be performed to gather data and ensure that the design will meet the established Acceptance criteria.

4.5 Design Review. The EST will conduct reviews during the development of the Proof-of-Concept per the project plan. Design review will be scheduled as needed and/or conducted at key milestones in the development phase and again at the completion of the project. The reviews should address project status, scheduling, cost, documentation, personnel, and design changes. The EST will conduct the review and may include potential end-users of the product when possible. All records of the reviews will be retained and evaluated. Any issues that are uncovered will be identified and corrective action will be taken and tracked to completion.

4.6 Design Verification. Upon Completion of the Proof-of-Concept design, the Engineering Support and Fleet Support Teams will perform verification to ensure that all the design specifications and objectives have been met. Verification may include operational testing, inspection, and a demonstration. All records of the verification will be retained and evaluated. If any issues are uncovered, a design change will be implemented and the design re-verified.

4.7 Design Validation. A final acceptance test will be performed by the Engineering Support and Fleet Support Teams to verify the Proof-of-Concept. The Proof-of-Concept may be demonstrated at various locations to potential end-users. All records of the validation will be retained and evaluated. If any issues are uncovered, a design change will be implemented and the design re-validated. If approved for implementation, the project will be turned over to the Acquisition Team IAW MCA-QP7511.

4.8 Design Changes. The impact of any proposed changes to the Proof-of-Concept Specifications during any phase of the design and development process will be evaluated by the EST. Upon acceptance, the changes are documented and communicated to the appropriate personnel to be implemented into the design.

5. NOTES. None

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6. DATA, FORMS AND REPORTS. Quad Charts.

7. QUALITY RECORDS. Quality records shall be maintained in accordance with MCA-QP4240.

Project Plan, IPR Minutes/Action Items, Verification Checklist/Action Items, Validation Inspection /Test Results/Action Items, and Engineering Change Order.

Storage Location:	ATEP Branch LAN G:/ drive or ATEP TMDE web site
Indexing:	By Project Name and File Name
Access:	Product Team Members
Filing:	Electronically
Storage Medium:	Computer
Maintenance:	LAN Manager
Disposition:	Erased
Retention:	Indefinite

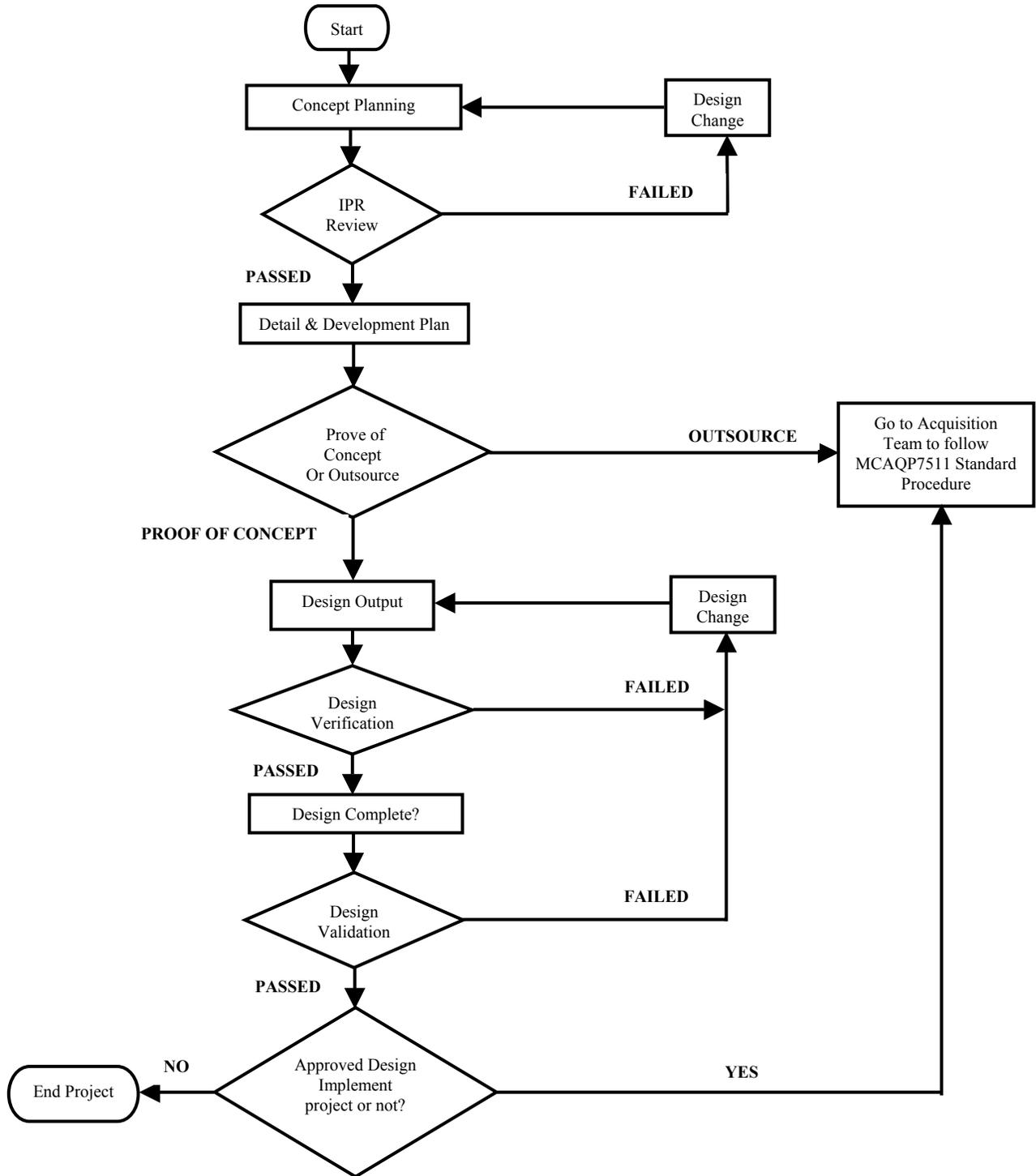
8. APPENDICES, FLOW DIAGRAM.

8.1 Design Flow Diagram - Appendix A

8.2 System Test Form – Appendix B

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APPENDIX A



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APPENDIX B

PROJECT NAME																	
TECHNOLOGY AREA: LEAD SERVICE: USMC																	
<u>PROBLEM:</u> •	<u>BACKGROUND:</u> •																
<u>PRODUCT / SOLUTION:</u> •	<u>IMPACT IF NOT FUNDED:</u> •																
<u>CUSTOMERS:</u> •	<u>FUNDING PROFILE (\$K):</u> <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> POC:																